A GEOGRAPHIC ANALYSIS OF PROFESSIONAL BASEBALL'S FIRST-YEAR PLAYER SIGNINGS, 1965-1977

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PREFACE

This project was initiated in December, 1977 when Dr. John F. Rooney handed me a carton of papers dealing with contemporary professional baseball player signings. My original plan was to analyze only a portion of the data for a paper to be presented the following April at the annual meeting of the Association of American Geographers. I became so engrossed with the subject that I soon decided to thoroughly examine the entire data set for a masters thesis. A two-month tour of many of the major league ballparks during the summer of 1978 further aroused my curiosity for the subject. The intertwining of baseball and geography has since become a personal labor of love. It is hoped that others might find this thesis interesting and informative.

I must thank Dr. Rooney for making the data available and for his invaluable expertise as my major adviser. Thanks are also extended to Dr. Stephen W. Tweedie and Dr. George O. Carney for their interest and timely advice.

I am indebted to Gayle Maxwell and her cartography staff for their professional work on the maps included in this thesis. I am likewise greatly appreciative of the work done by the typists Jean Schwab and Sharon Hair. Also, many thanks to Miles Bogh for his computer programming assistance and constant encouragement.

Finally, sincerest thanks go out to my family who were so supportive during my graduate residency.

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CHAPTER I

THE RESEARCH PROBLEM

Introduction

Any successful business establishment requires a continual replenishing of youth within its employment structure to remain competitive with its rivals. Aside from the obvious necessity of filling the vacated positions of retired or released personnel, young employees are often the ones expected to revitalize a business with their enthusiasm and seemingly unlimited potential. In no business is this more apparent than in professional sport and in few professional sports is this more vividly exemplied than in Professional Baseball.

Professional Baseball brings more young athletes into its system each year than any of America's other major professional sports combined. Baseball's 26 major league clubs annually sign approximately 1,000 amateur prospects to professional contracts. The competition for these "first-year players" is so intense that over 50 percent of them are divided among the clubs via a draft selection system. And, that is just the beginning of the competitive process. Once signed, a first-year player is normally assigned to a minor league team in his major league club's "farm system." (A major league club normally controls a minimum of four minor league teams, rarely more than six.)

In the minor leagues a prospect is given the opportunity to develop his talent with the aid of professional coaching while competing against teams of comparable skill. During and after a playing season those athletes exhibiting the most potential are advanced to a higher level of competition. The disappointing prospects are released with little hope of ever again playing in Professional Baseball's circuit. By releasing the failures the system is prepared to embrace another 1,000 new prospects the next year and the process repeats itself. Obviously, each step up Professional Baseball's competitive ladder becomes more difficult for most athletes to attain. By the time every inferior player is culled at some point during a minor league carrer, approximately 10 percent of his year's class of prospects will have performed at the major league level, and probably only one-half of these can expect to become everyday regulars. Yes, in Baseball, it is truly only the strong who survive.

The Scope of the Investigation

The scenario depicted in the introduction is of great interest to devotees of baseball. The sanctity and preciseness of Organized Baseball's record-keeping system has created a situation wherein the careers of professional baseball players are probably as well documented as any single group of men in America, save our Presidents. There is, however, one specific player characteristic typically ignored by baseball fans that is grist for the sports geographer's mill - a player's amateur origin. By examining the origins of many players one can begin to determine the player production capacities of various areas. That, in the broadest sense, is the purpose of this study.

This research is based upon a 100 percent sample of athletes (13,985 in all) who signed first-year player contracts with Professional Baseball from 1965 through 1977. Information concerning a player's origin (his address when the contract was signed), the player's subsequent degree of success as a professional, and, the major league club with whom the player signed are examined in order to achieve four primary objectives.

1. To discover what areas (country, state, county, and metropolitan area) show a propensity to produce quality amateur baseball players (those signing with Professional Baseball's clubs) and, conversely, what areas are poor producers of baseball talent.

2. To determine the relative successful productivity of an area's baseball player production. That is, what proportion of an area's professional signees subsequently advanced into the major leagues?

3. To discover any ongoing areal production or major league club signing trends from an annual analysis of the data.

4. To individually evaluate every major league club's signing and administrative strategy.

In addition, information pertaining to the history of professional baseball player acquisitions and Professional Baseball's amateur free-agent draft and scouting industry is included.

It must be noted that this research is not without its limitations. The most obvious weakness concerns the loosely defined explanatory variables cited in Chapters V and VI. This thesis is more descriptive in nature than it is analytical. Therefore, at this point no comprehensive quantitative testing of these variables has been attempted.

From this current lack of testing it is not meant to be impled that analytical techniques are not necessary in the analysis of factors influencing baseball player production. It was decided, however, that this unprecedented analysis of Professional Baseball's contemporary players would deal most specifically with the determination of the location and spatial distribution of the sampled players, thus leaving the significant task of more rigorously defining and analyzing the proposed explanatory variables for future research.

Research Justification

This research should benefit both the baseball establishment, those geographers concerned with sport and society, and sports aficionados everywhere. It is hoped that Professional Baseball's clubs might consider the results of the areal productive capacity analyses during their scouting and signing process. Baseball's scouting industry may react to these findings to become an even more efficient system than it is at present. Clubs might choose to realign the distribution of their scouts or their scouting territories. While a scout must continue to evaluate each prospective player chiefly by that player's potential, the significance of the player's origin and its productive history should not be ignored. Moreover, it may be helpful for clubs to know how other clubs have operated in the past. By more fully recognizing a rival club's most successful scouting territory, a club may choose to greatly increase its involvement in that area as well. And, those clubs that have not experienced competitive success in recent years may find it useful to compare their scouting and administrative strategies with those of the

consistently successful organizations.

From an academic perspective the findings will add to an already vast knowledge of this continent's cultural geography. Baseball has long been considered a vital part of the American sports culture, but geographic aspects of the sport have rarely been recognized as substantive research material. While identifying the varying degrees of importance or support that communities manifest toward the game may seem trivial, from a synthesis of such seemingly inconsequential facts emerges an increasingly comprehensive understanding of the spatial differences of our society.

Lastly, it must be added that a personal fondness for baseball was a very important factor in choosing to initiate this project. The author is only one of the hundreds of thousands of individuals who find it immensely pleasurable to annually follow baseball's events. Therefore, besides accommodating the game's management and the academicians, there are numerous others who may find this research helpful in more fully appreciating and understanding baseball's complexities.

Review of the Literature

An enormous amount of literature has been devoted to the game of baseball but very little has been directly related to its geographic aspects. The earliest published work examining baseball from a quasi-geographic perspective was authored by Lehman in 1940.[1] Lehman investigated the origins of 1,034 highly successful professional baseball players who had performed at various times between 1912 and 1939. By the use of a per capita statistic it was shown to what degree states

and densely populated urban areas had produced ballplayers. This study's main objective was not, however, to review the aggregated origins of these players. Instead, Lehman, writing as an educator rather than a geographer, attempted to reveal the influence that environmental factors had upon the development of a very complex physical skill by adults. As he was working during a period when the question of environmental determinism and the effects of heredity were hotly debated, Lehman was only secondarily interested in the actual geographic differences in baseball player origins.

It was nearly three decades later when a geographer first published research involving the origin of athletes. Rooney looked upon an area's rearing of skillful athletes in the same manner as economic geographers previously had regarded the spatially varied production of agricultural or mineral products. Using a statistical technique identical to Lehman's, Rooney was able to regionalize the United States with regard to its production of major collegiate football players who performed between 1961 and 1967.[2]

Rooney widened his geography of sport research in a book published in 1974. The major collegiate sports of football and basketball were given greatest attention, but also included was a data summary from one season of Professional Baseball's 20 major league player rosters (1968).[3] Additional research involving major league baseball was in the form of a cartographic presentation of baseball's diffusion process in the United States. Nine maps (one for each decade) were used to display how the origins of Baseball's major league participants had changed between 1871 and 1958.[4] Rooney concluded with a brief discussion of America's minor sports, high school athletic participation, and

encouraging comments to other sports-minded scholars of geography to, in effect, "come out of the closet" and readily examine sport from a geographic perspective.

While the number and depth of geographic analyses of baseball is limited, other social scientists - particularly sociologists, economists, and historians - have dealt with baseball quite extensively. Haerle, a sociologist, examined the careers of 335 former major leaguers who had played baseball at some time during the first half of the 20th century. Haerle found almost no influence on future baseball playing performances exerted by the variables of an athlete's region of origin or city size of birth. He reported that a majority of the successful ballplayers had engaged in farming or sports-related jobs during their upbringing and, that the level of a player's education was negatively related to the performance level of his professional baseball career.[5] In another sociological article, Scully reported the general racial attitudes of fans and Baseball's management as well as describing the inter-league and individual team roster differences with regard to the proportion of black and white players. His study of team rosters during the 1960's concluded that the National League clubs had far surpassed the American League in the hiring of blacks throughout the decade.[6]

Some of the most scholarly baseball literature has been written by economists. Gregory pioneered this trend when he devoted a book to the subject of baseball from an economic viewpoint in 1956. Gregory meticulously investigated the different values and monetary rewards of professional players in addition to detailing the legal aspects of Organized Baseball.[7] Also in 1956 Rottenberg authored an article

which analyzed Professional Baseball's player labor market.[8] In some instances the work done by both Gregory and Rottenberg, while being exceptionally comprehensive, is obsolescent due to the advent of more individual freedom and significantly higher salaries for players in the contemporary game.

Andreano and Davis have completed more recent, and yet partially out-of-date, economic investigations of Professional Baseball. Andreano's report in 1965 concerning Baseball's uneven competition and its supply of players is especially significant to this thesis. Andreano considered the unequal distribution of talent to be Baseball's fundamental problem. His position of questioning the merits of an amateur free-agent draft which was about to become operative is particularly interesting now that the draft process has been in place for 15 years.[9] Similarly to Andreano, Davis examined the competition in Baseball's player market from the early 1900's through 1971. Davis had the advantage of reviewing the effects of the amateur draft after it had operated for six full years. He judged the draft to be a highly positive, but not perfect, step toward club equality.[10]

Baseball's most voluminous research has been done by historians. The literary work of three men - Allen, Seymour, and Voigt - was particularly valuable in tracing the history of Professional Baseball's various types of player acquisitions. Allen authored a relatively comprehensive history of baseball in a book released in 1950.[11] Despite its pretentious nature, Allen's book proved to be an important guide for other baseball historians to follow and improve upon. Both Seymour and Voigt have published their baseball narratives in two volume sets. Seymour's initial work is centered around the historical

development of the game during the 1800's.[12] Seymour's second volume records Baseball's history from 1900 through 1930.[13] Voigt's first volume also traces the evolution of baseball during the 19th century.[14] Voigt's second book covers 20th century baseball history through the 1950's.[15] (Because these three historians write about the same subject from similar perspectives their narratives are often quite comparable. When a citation is made involving an incident reported by all three men an attempt has been made to cite the most detailed account.)

Various other baseball related literature cited during this research is too numerous to individually review here. Personal correspondence was extremely helpful in acquiring the sentiment of various individual club administrators, especially that with Paul Snyder, scouting director for the Atlanta Braves Baseball Club. And, while often not specifically cited, The Sporting News was an indespensible source of information about all phases of the game.

A review of a brief portion of the literature that employs or describes the location quotient statistic used extensively in this research is also appropriate. Rooney has used the identical method repeatedly in his sports research in order to assess the relative player producing capacities of various areas although he simply refers to it as a per capita measurement. Rooney contends that the error in measurement is minimal when the total population base is used as a comparative figure (versus using an age or sex structured population base).[16] Hence, this method is followed in this research for reasons of computational and comparison ease.

The first use of the location quotient and the coinage of its name was by Florence, Fritz, and Gilles. In 1943 these three individuals

used the method to measure the degree of localization of various United States industries.[17] Alexander summarized the ways in which the location quotient and other similar measurements could be derived in an article devoted to reviewing numerous methods of measuring the location of manufacturing.[18] And more recently, Smith has described the location quotient computation plus its advantages and drawbacks in examples involving data related to industries in England and Japan.[19]

FOOTNOTES

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CHAPTER II

THE HISTORY OF PROFESSIONAL BASEBALL AND ITS ACQUISITION OF PLAYERS

Introduction

It may seem to be a trivial matter but since the invention of the game of baseball, a supply of baseball players has been essential. As baseball evolved, from a simple game to a gentleman's sport, and then to a highly competitive and organized professional sport, the supply of players became an increasingly talented and valuable commodity. As the game was refined a team could successfully compete only if it had skilled players at every position, thus necessitating each club to acquire the best talent available. To fully appreciate the evolution of baseball and the history of its methods of player acquisition, a brief historical review of Organized Baseball is in order.

Baseball in the 19th Century

The Formative Years

During baseball's earliest formative years only the socially elite were given the opportunity to play the game. The first organized baseball team about which anything is known was the Knickerbocker Baseball Club of New York. The Knickerbockers, comprised of socially elite New

York City businessmen, were established in 1845 through the efforts of Alexander Cartwright. Cartwright was the principal force behind baseball's earliest existence and many consider him to be the actual inventor of the game. Other men of a similar social class soon began organizing clubs in response to the example set by Cartwright's Knickerbockers, so that by the early 1850's eight ball clubs in the New York City area were firmly established and enjoying the game of baseball.[1]

In 1859 25 gentlemen's clubs in the New York metropolitan area agreed to form a permanent body entitled the National Association of Base Ball Players. Initially these clubs clung to the idea of baseball as a gentleman's sport, despite the fact that baseball's popullarity had spread among people from all walks of life. Retaining this gentlemanly approach enabled the Association to maintain an elitist-amateur position toward the sport. However, the inevitable professionalism became apparent by the 1860's. Triggered by a post-Civil War baseball mania, an increase in the number of Association members, and the fierce interest to provide a winning team for their respective towns, clubs modified their elitist policies and subtly invited "ringers" to join their teams in order to improve their chances of winning. The pattern for commercial baseball was now set. The charging of gate admission became customary, often with the receipts being divided among players, routinely those not of "gentleman stature."[2]

It is reported that the first time a player was actually paid for his baseball playing services was in 1860 when the Brooklyn Excelsior club secretly began to pay its star player. This was against

Association policy, but by 1866 the practice of under-the-table payments became well documented. These payments were not believed to have been large and there is no report in the literature that suggests teams or individuals were fined or suspended due to such payments. Another common form of payment was the provision of jobs outside of baseball to outstanding players. The players were paid salaries ostensibly for their work, but in reality the players earned their pay for playing baseball.[3]

True Professionalism

With a phenomenal increase in Association memberships (by 1868 nearly 350 clubs were members[4]), it was obvious that the United States had begun its love affair with baseball. The fact that fielding a good baseball team could become a profitable venture substantiated the American spectator's interest. The next logical step was for the sport to become truly professional and this came to pass in 1869. The first all-salaried professional club was formed by a former expert cricket palyer and previous member of the Knickerbockers, Harry Wright. Wright's Cincinnati Red Stockings found immediate success by winning 56 games without a defeat in their first year of operation. In addition to their impressive winning achievements, the Red Stockings were equally as successful from a financial standpoint. Thus, other cities and clubs soon began to subscribe to the theory of fielding all-professional teams as well.[5]

This push toward professionalism is evident from the reports of the National Association's next few conventions. Twenty pro clubs were able to dominate the amateurs during the 1870 proceedings and by

the next year 10 of these all-pro clubs met to form their own organization, the National Association of Professional Baseball Players. The Professional Association suffered from many problems, not unlike those that other professional sport organizations would encounter over the next century. These included the problems of designing reasonable schedules, having clubs too geographically dispersed, arranging a sensible championship format, and dealing with teams widely varied with respect to talent. These difficulties were made even more complex due to the numerous turnover of clubs that were involved in this Association during its short lifetime.[6]

Acquiring the Players

The professionalization of baseball further accelerated the competitiveness between the various clubs so that the acquisition of the best talent available was of supreme importance to each team. Highly organized scouting systems, an essential facet of contemporary professional sport, were not yet on the scene, but even at this early stage the most rudimentary form of a player development system was in evidence. It is reported that by 1867 the Brooklyn Excelsiors had many teen-aged boys involved in an organized baseball training system. This was done in hopes that the most skilled youngsters might someday replace the older members of the Excelsior parent club. Some clubs held amateur tryouts and hand-picked the most talented players. Other clubs depended upon newspaper reporters and/or noted citizens knowledgeable of the local talent for suggestions and recommendations regarding likely prospects.[7]

The failure of financially unsuccessful teams helped to introduce

by the 1870's the practice of selling players. Managers of penniless clubs that were planning on disbanding began to sell their best players to other clubs so as to lessen their financial difficulties. In 1875 a shifting of two players between the National Association's two Philadelphia clubs initiated a tactic that Professional Baseball's management would use often over the next century.[8]

The stealing or pirating of both amateur and professional talent was a less accepted but significant method of acquiring talented ball-players. While on tour professional teams would frequently play exhibition contests versus a small town's own best amateur or semi-professional team. Before leaving town the pro club would often take possession of the most impressive local players in order to solidify their own roster. The local players in question were no doubt elated by the turn of events but this practice tended to make local fans scornful of the professional game and its management.[9]

Some professional players, given the proper financial inducement, were not above jumping from one club to another. This action, termed "revolving," threatened the integrity of early professional baseball. This practice was legally eradicated in 1879 when the baseball club owners agreed to include a clause in every player's contract that would prevent professional players from bargaining freely in the market-place.[10] This clause, called the "reserve clause," was instituted as part of Professional Baseball's National Agreement. This agreement marked the true beginning of Organized Baseball as it reserved a club's rights to specific players and set forth the principle of safeguarding a club's territorial rights.[11]

The reserve clause became the rock upon which Organized Baseball

rested. The clause said, in effect, that a club owner could employ a player for one year and hold in reserve the right to renew the man's contract the following year. The player was put in a position where he either accepted the contractual terms or chose not to play professional baseball. The club owned him, totally and incontrovertibly in perpetuity. This clause was to remain unchanged for nearly an entire century before the players and management agreed to some revisions in 1976.

The Major Leagues

The National Association of Professional Base Ball Players that was formed in 1871 endured through the 1875 campaign. Evils of gambling, revolving, problems of franchise instability, and a lack of competitiveness brought about a need for reform. In 1876 eight of the larger city clubs voted to establish a new "major league." Hence, the National League of Professional Baseball Clubs was born. In essence, this National League is the one still in existence today. The name chosen by this organization was significant. Prior to this time all baseball clubs had been united as player associations. In 1876 the National League players became subordinate to the dominant club owners, evidence of the increasing importance of Professional Baseball's management.[12]

The National League dominated Professional Baseball throughout the remainder of the century despite serious challenges by other organizations. The American Association was the first competing league. The Association became a recognized major league in 1882 and remained in contention through the 1891 season. The Union Association, emerging

for only the 1884 season, helped to expand the number of major league clubs to 34, the most clubs until then or thereafter to play in the major during one season. Finally, in 1890 a union of pro players, entitled the National Brotherhood of Professional Baseball Players, established their own league which lasted for one year. An outgrowth from management's refusal to discuss player grievances, the Brotherhood or Players League was able to persuade a majority of the National League players to jump to this new league.

Despite these challenges, especially the latter one involving a revolt of its own players, the National League managed to remain the dominant major league. After an 1891 settlement was reached with the Brotherhood in which the Nationals reacquired total control of their players, the Nationals forced the American Association into a merger. By virtue of the merger the National League absorbed the Association's best players and most profitable locations so that the National League was in complete control of major league baseball during the next decade.[13]

The Minor Leagues

The available literature does not specifically clarify how a league gained major league status during the late 1800's but any league operating within the framework of Organized Baseball and not recognized as a major league was regarded as a minor league. By 1877 three minor leagues were in existence and major clubs soon learned that the minor clubs could act as a valuable supplier of professionally tested players. Cooperative gestures were made by the majors (mostly by the National League) toward aiding minor league development but the minor

leagues were not always treated fairly. The competition among the major leagues created a fluctuating number of teams and a need for an immediate supplier and disposer of players. Thus, the minor leagues were at the mercy of the major league clubs. An agreement in 1883 made it necessary for all major clubs to legally purchase minor players with the money going to the minor club involved. However, the major leagues would ignore this agreement whenever possible and instead successfully "raid" minor league rosters, the minor leagues not receiving just compensation for their developmental tasks. Despite this vulnerability to the majors, the minors grew to include at least 20 separate leagues that operated successfully during the remainder of the century.[14]

Baseball in the 20th Century

A Period of Stabilization

The National League's major league monopoly was challenged soon after the turn of the century. The challenger was the American League, a descendant of the Western League, which had been proclaimed the strongest minor league during the 1890's. The American League became a recognized major league in 1901 when its eight clubs successfully raided the National League of nearly half its players. This was made possible due to the fact that the American League clubs ignored the reserve clause and instead offered substantially higher salaries and an opportunity for disgruntled players to flee from a league that had ignored player demands since the Brotherhood debacle. The American League, by disregarding the National Agreement's policy on territorial rights, also moved into prime market areas which further threatened the existing National League clubs.[15]

The National League suffered financially during 1901 and 1902 and was prepared to seek a peace with the upstart American League prior to the 1903 season. The American League clubs insisted upon remaining fully intact, thus scuttling any merger propositions brought forth by the National League magnates. In the end the two leagues came to terms by legally awarding players to each club and agreeing to recognize the reserve rights of each other's clubs. Also agreed upon was a settlement of territorial rights which was to have far-reaching results. In the next half century these two rival leagues would experience no franchise shifts and it would be nearly 60 years before either league would increase its total number of clubs.[16]

The 1903 geographic alignment of the two major leagues is displayed in Table I below.

TABLE I

MAJOR LEAGUE BASEBALL'S GEOGRAPHIC ALIGNMENT, 1903-1953

American League	National League
Boston	Boston
Chicago	Brooklyn
Cleveland	Chicago
Detroit	Cincinnati
New York	New York
Philadelphia	Philadelphia
St. Louis	Pittsburgh
Washington	St. Louis

The two major leagues were now at peace but the many minor leagues were not as yet satisfied. The minors had been the chief victims of the conflict between the American and National Leagues as their rosters had been ruthlessly raided. In 1902 many of the minor leagues united together into a cohesive organization, the National Association of Professional Baseball Leagues, in order to stablize the entire minor league structure, as well as pressuring the majors to recognize the minor clubs' player protection rights. After the American and National Leagues had reached their own joint settlement, the majors joined with the National Association to sign a new Major-Minor League Agreement. This agreement provided the protection necessary to keep the minors afloat. A hierarchical classification system that the minors had proposed earlier was accepted by the majors. An especially important provision dealt with the creation of a draft selection system. This system enabled the majors to purchase certain selected minor league players with the monetary compensation determined by a player's minor league classification. This system also allowed the higher classified minor league clubs to select lower classified players. The Major-Minor League Agreement has undergone revision since 1903 but this basic agreement continues to be a key governing instrument of Organized Baseball.[17]

Since 1903 only once has there been a serious threat of a third competing major league - that by the Federal League. It endured only two seasons, 1913 and 1914, suggesting to other interested parties that there was virtually no chance of successfully competing with the American and National Leagues. In addition, Organized Baseball came to be regarded by the United States' Federal Courts as a sport rather

than a business, thus upholding professional management's right to include the reserve clause in every player's contract. This meant that a professional player's freedom would continue to be extremely limited until 1976 when management was forced to revise certain provisions of the reserve clause.

The Development of Farm Systems

The often cited Black Sox scandal, the supreme command of Major League Commissioner Kenesaw Mountain Landis, and Babe Ruth's heroics with the powerful New York Yankees received much of the attention of the baseball writers during the 1920's; yet, a more obscure event ultimately may have been the most significant for contemporary Organized Baseball. The development of farm systems, where a major league club came to own or control a chain of minor league clubs and its players, revolutionized Organized Baseball. A farm system represented a type of vertical integration where a major league club nurtured its own chosen crop of untried but potentially talented players in hopes that a few of the more gifted ones would advance through the ranked classification system and eventually become major leaguers. The object of the system was for the major club to assure itself of a steady flow of young, inexpensive talent. By maintaining an efficient minor league farm system major league clubs would no longer need to depend upon expensive purchases of unfamiliar players from an unreliable source (the independent minor clubs).

The person most responsible for the shift to the major's ownership or control of minor clubs was Branch Rickey. His revolutionary idea changed the role of major league clubs from one of solely a consumer

of talent to one of an explorer, developer, and then consumer. The idea of creating a farm system was generated out of necessity. Rickey's task during and following World War One was to form the National League's financially destitute St. Louis Cardinal club into a pennant contender. Following the strategy of the wealthier clubs, that of purchasing the best prospects from the independent minor league clubs at relatively high prices, was out of the question. Rickey resolved that the most logical plan for the Cardinals was to personally scout and sign the most impressive amateur players to low paying Cardinal contracts. The Cardinals could then develop these youngsters in their own minor league teams.

With Rickey's organizational genius and keen eye for judging talent the St. Louis farm system was a spectacular success. During the 1920's the Cardinals developed into one of the strongest National League clubs both from a performance standpoint as well as financially. At its peak before World War Two the St. Louis Cardinals farming empire was comprised of 32 clubs containing between 600 and 700 players.[18] The large stockpile of Cardinal-owned players enabled the Cardinals to become a totally independent club. From 1919 through 1943 the St. Louis club did not purchase a single player from some other source. Meanwhile, the club enjoyed the luxury of being able to sell their discards to needy clubs for very handsome prices. This provided even more incentive for other clubs to imitate Rickey's farm system.[19]

The point most relevant to this research is that Rickey's system established the role of the major league club as an amateur talent seeker. With fewer independent minor clubs the majority of amateur players were to be scouted and signed directly by the major league clubs.

Thus, it became apparent during the 1930's that those major league clubs with the best organizational scouting and developmental systems would have an advantage when their players began advancing into major league competition.

The development of this vertical integration within Organized Baseball came not without protest. Commissioner Landis was adamantly opposed to farm systems and the major league clubs' increasing control of Baseball, but even his supreme power failed to halt their advancement. In the mid-1930's Landis proposed a common draft for players in hopes that each major league club would gain a more equal access to promising talent. This proposal was met with contempt and suggestions of socialism by the most powerful owners and ultimately not endorsed. It would be some 30 years later before a similar plan, the amateur free-agent draft, would be established by the major league club owners.[20]

World War Two's Influence

During World War Two Organized Baseball continued to exist but its quality declined due to the paucity of manpower caused by the armed services' utilization of major leaguers. The majority of men that remained in the United States to play professional baseball were physical culls and athletes of extraordinary youth or old age. The Washington Senators club exploited a new source of player talent during the war, a source that has since grown considerably. The Senators found that they could employ competitive light-skinned Latin American ballplayers to play for both their minor league teams and the parent Washington club. Although this was primarily a stop-gap

measure of war time necessity, the action taken by the Senators opened the eyes of club management elsewhere so that the Spanish-speaking players were to be given more opportunity to play in the United States in the years to follow.[21]

Immediately after World War Two Organized Baseball experienced an enormous surplus of talent. With many professional ballplayers returning from the armed services, major league baseball's quality rapidly became equal or superior to its pre-war era. Also, gradual acceptance of the Negro ballplayer, who traditionally had been banned from the majors and forced to play in segregated professional leagues, was to be an increasing factor in advancing both the quality and quantity of available talent.

The post-war revived minor leagues reached their peak in 1949 when nearly 42 million spectators watched 464 teams compete in 59 different minor leagues. This meant that over 9,000 young men were playing under Organized Baseball's umbrella, a participatory figure that has never again been matched. An increasing involvement with other sports, the impact of television providing a new form of entertainment for the American society, and the fan's lack of acceptance of the black ballplayers in many of the southern minor league cities are commonly regarded as significant factors in the decline of the minors since the 1949 peak. In contrast, by the 1960's there was an annual average of only 20 leagues, and in 1973 11 million fans watched approximately 2,500 players involved in a 136 team-18 minor league organization, a decline to less than 30 percent of the minor's peak year totals.[22] (Similar figures to 1973 are reported for 1979.)[23]

The Bonus-Baby Era

The 1950's and early 1960's came to be known as Baseball's bonus-baby era. The major league teams found themselves in direct competition with each other for player talent as they had all assumed the burden of scouting for the best available amateur talent. When this task had been part of the independent minor league clubs' duties competition for players was less obvious and more localized. The minor clubs normally had scouted only their own geographic areas, doing as best they could with local talent. A major club in the 1950's found it necessary to hire at least 10 scouts and extend its scouting territory throughout the United States and foreign countries in order to be competitive.

A club had to be prepared to better another club's bonus offer to the amateur ballplayer who, before signing a professional contract, was free to negotiate with any interested club. The first instance of a player receiving a substantial bonus for signing his first professional contract occurred in 1941. The manpower shortage during World War Two postponed the escalation of this practice but by the 1950's bonus payments were quite common. In fact, Baseball's traditionally tight-fisted management grew to be incredibly loose with its bonus money. Consider these facts: 1951's total bonuses of an estimated 4.5 million dollars nearly equalled the aggregate major league salaries for the year; an exceptionally talented amateur player could expect to receive at least 50,000 dollars for signing his pro contract, and; an entire lowly classified minor league could have been operated for what a few untried youngsters were collecting in bonus payments.[24]

The practice of paying these huge bonuses came to be regarded as a necessary evil by Baseball's management. As it grew progressively costlier for clubs to lure talented athletes into professional baseball the practice tended to favor the wealthier clubs. They could afford to offer the highest bonuses and some of these clubs increased their advantage by signing more players than their systems required so as to stockpile the talent away from rival clubs. Throughout this period numerous rules were put into effect in an attempt to limit such advantages but these frenzied bonus-baby years continued until December of 1964 when Baseball's club owners finally agreed to shift to an amateur free-agent draft.

Recent Developments

The bonus-baby era was also a time when some major league owners recognized an opportunity to increase their profits by moving their franchises to more favorable urban markets. The first shift in the major's geographical alignment took place in 1953 but the most influential movement occurred when the National League's two New York clubs moved to California prior to the 1958 season. This move set the stage for Baseball to increase the total number of major clubs. Expansion and franchise shifts became commonplace during the 1960's and 1970's so that by 1979 the majors were comprised of 26 teams, two of which were located in Canada's largest cities. Table II on the following page shows Baseball's 1979 major league alignment.

The enlargement of the majors from 16 clubs to 26 within a period of less than two decades had its effects upon the quality of play. The baseball owners justified expansion as a means to bring major league

ball to neglected urban areas. It soon became evident, however, that the enlargement of the leagues was not in response to a surplus of player talent. The expansion clubs began with discards from the established clubs and, with no immediate help from their newly formed farm systems, evolution toward a competitive balance was slow.

TABLE II

MAJOR LEAGUE BASEBALL'S GEOGRAPHIC ALIGNMENT, 1979

American League	National League
Baltimore	Atlanta
Boston	Chicago
California (Anaheim)	Cincinnati
Chicago	Houston
Cleveland	Los Angeles
Detroit	Montreal
Kansas City	New York
Milwaukee	Philadelphia
Minnesota (Minneapolis-St. Paul)	Pittsburgh
New York	St. Louis
Oakland	San Diego
Seattle	San Francisco
Texas (Dallas-Ft. Worth)	
Toronto	

A final event in 1976 had a pronounced effect upon the player's salary structure and reinforced the competitive advantage of the wealthier club owners. An arbitrator's decision was upheld by a Federal court whereby Baseball was forced to modify its sacrosanct reserve clause system.[25] In response to the decision the players and management reached a settlement which allows the veteran contemporary ballplayer, once he has fulfilled the terms of his standard player contract, an opportunity to become a free-agent. The professional free-agent puts his services for sale on the open market by placing his name in Baseball's annual re-entry draft. Each player in this draft may be selected by a maximum of 13 major league clubs. A selected player then has the freedom to negotiate a contract with all of the interested clubs and chooses the offer most to his liking. As a consequence, veteran player salaries have escalated dramatically and the lesser spending club owners have found it increasingly difficult to field pennant contending clubs.[26]

While the adroit use of professional free-agent acquisitions has helped many clubs become pennant contenders, the owners all agree that a club cannot afford to depend solely upon these infrequent, expensive acquisitions. As in Branch Rickey's days, the development of younger players through a healthy farm system remains the most efficient process by which to become competitive.[27]

FOOTNOTES

[1]Harold Seymour, The Early Years, Vol. I: Baseball (New York, 1960), pp. 15-22.

[2]David Quentin Voigt, From Gentleman's Sport to the Commissioner System, Vol. I: American Baseball (Norman, Oklahoma, 1966), pp. 9-13.

[3]Seymour, Baseball, Vol. I, pp. 47-48.

[4]Ibid., p. 46.

[5]Ibid., pp. 57-58.

[6]Ibid., pp. 59-60.

[7]Ibid., pp. 66.

[8]Voigt, American Baseball, Vol. I, p. 58.

[9]Lee Allen, 100 Years of Baseball (New York, 1950), p. 70.

[10]Seymour, Baseball, Vol. I, p. 108.

[11]Ibid., pp. 146-47.

[12]Ibid., pp. 75-80.

[13]Allen, pp. 74-114.

[14]Robert Obojski, Bush League: A History of Minor League Baseball (New York, 1975), pp. 3-13.

[15]Seymour, Baseball, Vol. I, pp. 308-14.

[16]Ibid., pp. 322-23.

[17]Obojski, pp. 16-17.

[18]Harold Seymour, The Golden Age, Vol. II: Baseball (New York, 1971), pp. 410-17.

[19]Arthur Mann, Branch Rickey: American in Action (Boston, 1957), p. 108.

[20]David Quentin Voigt, From the Commissioners to Continental Expansion, Vol. II: American Baseball (Norman, Oklahoma, 1970), p. 147.

[21]William B. Mead, Even the Browns (Chicago, 1978), p. 229.

[22]Obojski, pp. 27-28.

[23]"1979 Minor League Directory," The Sporting News (April 7, 1979), p. 44.

[24]Paul M. Gregory, The Baseball Player: An Economic Study (Washington, D.C., 1956), pp. 162-69.

[25]Peter Bonventre, "Off the Reservation," Newsweek (January 5, 1976), p. 51.

[26]Larry Keith, "Is It Daft, or Deft, to Draft?," Sports Illustrated (November 7, 1977), p. 31.

[27]Murray Chass, "Farm System Hale and Hearty Despite Supply of Free Agents," The Sporting News (March 25, 1978), p. 38.

CHAPTER III

A FREE-AGENT DRAFT AND THE SCOUTING INDUSTRY

Baseball's Amateur Free-Agent Draft

Why a Free-Agent Draft?

Baseball's decision to shift to an amateur free-agent draft grew directly out of the bonus chaos of the 1950's and early 1960's. The proposal of a draft system was not, however, the first step taken by management to limit the size and number of bonuses. One of the more drastic pre-draft measures was a rule in 1961 that made it possible for each club to protect only one bonus player not on its major league roster. All of a club's other bonus players became subject to an unrestricted minor league draft whereby another club could acquire any unprotected bonus player's rights for $25,000, payable to the original signing club. Most clubs could not afford to protect the potentially talented but unpolished players on their major league rosters so a great number of bonus players soon found themselves playing for someone other than their original signing club. Between 1962 and 1964 over 150 first-year bonus players were forced to move to other clubs via the minor league draft. The 1961 rule did little to discontinue the bonus as, in fact, bonus payments to individual players continued to escalate. The best amateurs in the early 1960's were receiving at least $100,000 to sign a professional contract and a conservative 1961

estimate determined that bonuses had cost the major league clubs $12 million.[1]

By season's end in 1964 most clubs were of the opinion that changes were necessary. Despite the strong opposition of wealthy clubs (the Los Angeles Dodgers, St. Louis Cardinals, New York Mets, and New York Yankees) a new rule was adopted that established the amateur free-agent draft. The reasons that the great majority of clubs favored an amateur draft were simple. It was believed that the draft would give lesser successful teams (those normally lower in the standings) a more equal chance to sign the best available amateur talent. Furthermore, an amateur draft would help to diminish the size and importance of the bonus payments.

The amateur free-agent draft began in December of 1964 and the process continued virtually unchanged through the 1970's. Two drafts are held annually. The most important draft (that with more eligible talent) occurs each June after the spring high school and collegiate seasons have ended. Another selection process is held in January which permits those athletes who have become eligible with the new year to be chosen. The January and June drafts have two separate phases. The "regular phase" can include all of those players who have never before been drafted while the "secondary phase" involves only those players who were selected in a previous draft but remain unsigned.

The draft system permits the clubs to draft the negotiation rights of only those amateur players who meet certain requirements. Only amateur players that are at least high school graduates are eligible to be drafted. Any athlete at a junior college or not affiliated with

the National Collegiate Athletic Association whose playing season is not in session can be selected without restriction. The NCAA member schools and the major league clubs agree that those players involved in NCAA competition must have completed their junior season or be a minimum of 21 years of age in order to be drafted. Finally, only those players native to or residing in the United States are draft eligible. Foreign players remain free to negotiate with any interested club. Those eligible American players who are not selected in the draft but wish to play professional baseball are also free to negotiate with any club. These players, known as "free-agents," have little or no bargaining leverage despite their freedom as they are free only because all of the clubs are skeptical of their potential talent.

A club's draft selection order is determined by an inverse ranking of the previous season's won-loss percentages for all of the clubs. Each club receives one selection per round, the number of rounds dependent upon the available supply of talented players. Once drafted, a player can negotiate only with the club that has drafted him. If the club fails to sign a drafted player within six months, the player can then return his name into the draft pool and hope to be selected by another club in the next draft's secondary phase. The secondary draft phase was established to ensure that clubs bargain honestly with those players drafted during the regular phase. Besides the player's bargaining leverage created by the secondary phase, the six month period between the two drafts gives those undecided athletes extra time to decide whether to sign a professional contract or choose some other career alternative. Because many of Baseball's draft selections are recent high school qraduates this additional opportunity is thought to be necessary.

The secondary phase may be helpful for the undecided player, but its existence has created a less than efficient solution to Baseball's bonus payment problem. The threat of losing a drafted player, unhappy with the original drafting club's offer, to a more generous club in the secondary phase or to an interested college has helped to continue the practice of offering sizeable bonus inducements. The enormity of the bonuses has declined however, as a result of the establishment of the draft. Whereas the most sought after player in 1964 received a bonus of $200,000, the number one man in the 1965 draft signed his first professional contract for only one-half of that amount. Moreover, the total number of players receiving substantial bonuses has declined to a more reasonable amount since 1964.[2]

A Comparison With Other Professional Sport Drafts

Organized Baseball's shift from a laissez faire, bonus-crazed, search and sign behavior to a structurally governed amateur free-agent draft was significant, but not a precedent setting event in professional sports. Professional Baseball has been the most conventional and conservative of America's popular team sports and its deliberate conversion to an amateur draft selection system is a fine example of this sport's tradition-bound nature. For comparison sake, a brief look at America's other major professional team sports and their amateur player drafts is appropriate.

The National Football League held its first annual "Selection Meeting," or college player draft, in 1936, 16 years after the league's founding. This organization's draft is probably the most publicized

of any of the amateur athlete procurement proceedings in the United States. The early acceptance and longevity of the NFL draft has no doubt influenced other sports to imitate their system. The NFL currently prides itself on the fact that its college draft acts as a most significant team equalizer.[3]

The National Basketball Association has held an annual amateur draft since the league's inception in 1946. The NBA attempted to give its members the unique advantage of allowing each club to choose one player from within a 75-mile radius of its home arena in lieu of a first round draft selection. This territorial concept helped to keep locally popular college or, in some cases, high school players performing in nearby urban markets. A bitter dispute between the New York and Philadelphia clubs over the rights of Princeton's All-America Bill Bradley finally halted this practice of territorial advantage after the 1965 draft.[4]

The National Hockey League did not choose to engage in an amateur draft until after their 1967 season. The NHL's situation prior to their first draft was unique in that their six clubs were very much involved with the funding of amateur player development programs and semi-professional junior-league hockey. With so few major league clubs and their great financial interest in the developmental programs, an amateur draft was not considered necessary to equalize NHL talent or stabilize bonus payments. But, with the rapid expansion of the NHL in 1967 there came an immediate need for competitive balance. Thus, the decision to establish professional hockey's universal amateur draft. Because of even greater expansion and another professional league to contend with during the next decade, the NHL clubs virtually ignored

the developmental programs so that soon, despite the increased importance of inter-collegiate hockey, the NHL found the amateur talent base exceedingly thin on drafting day.[5]

A few observations mentioned in a recent article comparing the drafts of the NFL, NBA, and Organized Baseball are fitting for this comparison discussion. The point is made that both the NFL and NBA clubs are more certain of a drafted player's potential than are Baseball's clubs. This is especially true of the early round selections for the three sports. Professional football and basketball clubs are frequently able to judge an amateur's potential against other mature college competition. Baseball clubs are at a decided disadvantage when judging talent. Baseball depends highly upon the high school athlete who's caliber of opposition is often-times suspect. Also, the nature of the sport makes baseball talent judging more difficult. It is believed that it takes longer for an athlete to develop all of the skills necessary to become successful in baseball versus most other team sports. Thus, even the best collegiate baseball player may possess a weakness that will not become apparent until he opposes better professionally trained players. This difference in maturation and developmental time between the three sports is obvious when one studies the trends of the various drafts' subsequently successful athletes. Whereas professional football and basketball team rosters consist mainly of early round draft choices, the major league baseball clubs commonly find some of their best talent in the draft's later rounds or even on free-agents.[6]

The Professional-Collegiate Conflict

There was once a time when a professional baseball club was assured that it could sign any talented high school graduate that it desired. All that was necessary was a nice bonus offer and some effective cajoling and a prospect was as good as signed. That is no longer the case. The contemporary amateur athlete is faced with another alternative that an increasing number of them choose - a collegiate playing career coupled with the opportunity to further one's education.

Actually, a collegiate career has always been an available alternative (provided the athlete's academic standing was acceptable), but the option has never been as practical as it is at present. In recent years college baseball has emerged as a major sport on a few campuses around the country and many other schools are currently upgrading their baseball programs in order to compete. With this emergence has come many of the benefits that other major collegiate sport programs have offered to the amateur athlete, including: a full scholarship, an attractive schedule with a great deal of inter-regional traveling, the opportunity to continue to display one's talents in front of professional scouts, and, other general forms of preferential treatment afforded student-athletes.

The professional clubs are not in total disharmony with those colleges and universities which provide quality baseball programs. College baseball acts as a national development program for the professional game, one that the professionals do not financially maintain. So, in effect, the collegiate game has become an independent farm system for the professionals. The improvement of college baseball

has also aided the professional scouting industry. A scout is able to watch a group of talented prospects perform during a college game whereas a normal high school visit is for the investigation of only one player. Professional scouts have the additional advantage of judging a college player's potential over a longer period of time. In the long run this should benefit the professional clubs by increasing their knowledge of the available amateur personnel.

Administrators of professional clubs concur that the quality of college baseball has greatly improved. These experts agree that the contemporary top-ranked schools play at a competitive level comparable to some of the better Single A professional minor league teams and that other major schools are equivalent to the professional rookie league classification.[7] An example concerning the Atlanta Braves exhibits how one club has adjusted from the high school to collegiate player market over the past decade. It was estimated that early in the 1970's 80 percent of the Braves' first-year players were signed directly out of high school. By 1979 this figure had reversed so that 80 percent of Atlanta's signed prospects had experienced some type of collegiate competition.[8]

There are, however, conflicts between the collegiate and professional game. One problem is bonus money. Professional clubs have, in a sense, become a reliable scouting agency for the college baseball coaches. When a high school graduate is selected in the amateur free-agent draft college coaches will promptly contact the youth to make counter-proposals to the drafting club's offer. Because a talented high schooler has a possible collegiate career as one of his options, he is able to bargain with the professional club with a great deal of

leverage. As a result the signing bonuses offered to athletes just out of high school are again on the rise. Another trend has been for collegiate players to sign with professional clubs following their junior year. This procedure tends to favor the player during negotiations with the drafting club because the player has the option of playing a final year of college baseball if the bonus incentive is not satisfactory. This type of strategy can backfire, however, if the player's senior year achievements are not exceptional. He then has no choice but to sign with any interested club for considerably less money.[9]

Another conflict between the collegians and professionals involves the question of what is best for the player. This is where Professional Baseball believes that it has an edge. While recognizing the fact that inter-collegiate baseball has improved in recent years, a consensus of professional officials contend that it is best for both the prospective player and the signing professional club to sign a player as soon as possible, despite the inherent problems of judging potential talent at such an early age.[10] The early signing procedure ensures that a player will benefit from better coaching and competitive opposition throughout these most important formative years. It also provides a successful player the opportunity for a longer professional career before he reaches the age when his value becomes limited. In addition, professional clubs can make counter-proposals of their own. They commonly attempt to persuade the very best young athletes to sign directly out of high school by providing the finances necessary to pursue a college education during the off-season.

Baseball's Scouting Business

> He sits motionless in the hot sunshine, with a shapeless canvas hat cocked over his eyes. At last, responding to something on the field not perceptible to the rest of us, he takes out a little notebook and writes a few words in it, and then replaces it in his windbreaker pocket. The players steal a glance at the lone stranger as they come in from the field at the end of a half inning; the managers pretend to ignore him. Nobody knows his name, but everybody recognizes him, for he is a figure of profound, almost occult knowledge, with a great power over the future. He is a baseball scout.[11]

The business of finding and judging baseball's amateur talent is assigned to the baseball scout. A good baseball scout has a near-perfect understanding of all phases of the game that enables him to be capable of accurately determining a player's value and potential after only a few investigative occasions. And, although the shift to an amateur draft process has somewhat changed a scout's role, his wisdom directly influences the selection of baseball's future professional players.

A widespread distribution of baseball scouts has evolved from a time when individual ball clubs realized a need for more talented players than their local areas could adequately supply. This need became particularly important once the major league clubs had begun to control minor league rosters during the 1920's and 1930's. Hence, the clubs began employing a few men in various parts of the nation to search for talented prospects. The number of scouts grew over the years so that by the 1960's a well established network of scouts combed the ballyards in every part of the country in search of the next Henry Aaron or Sandy Koufax.

The fact that the procurement of youthful talent is of major importance is substantiated by the contemporary employment figures

and the money allocated toward Baseball's scouting industry. Most major league clubs employ approximately 10 full-time scouts and at least that many part-time scouts. (The 1965, 1970, and 1975 editions of the Baseball Blue Book listed an average of over 500 employed scouts.) In addition, in 1974 Baseball's owners voted to establish a centralized scouting force. This body, the Major League Scouting Bureau, offers a free-lance scouting service, complete with computerized scouting reports on the most talented amateur prospects. The amount of money that a major league club spends annually simply for scouting purposes is difficult to attain but a 1976 estimate of $7.5 million for the combined 24 clubs seems conservative.[12]

Prior to 1965 and the amateur draft the scouts were not only in the midst of the bonus chaos but their existence helped to perpetuate and increase the bonus payments. During the bonus-baby years a scout's job was twofold. He was to evaluate the talent and also persuade certain prospects to sign with his club. The persuasive portion of the job meant that the scout sometimes had the authority from his employer to negotiate with the amateur player. A scout was in a position to better an opposing scout's financial offer as well as getting to personally know the player with whom he was dealing. The degree of personal contact became important when opposing scouts offered essentially the same monetary inducements to a player. Then, the more personable scout gained the advantage and normally came away with his player.

The draft makes personal contact and friendship between the scout and player less necessary. As a result, some clubs operate with fewer full-time scouts. Also, a contemporary prospect may notice a scout's watchful eyes as he performs as an amateur but when the contract

negotiating begins the drafting club sends its scouting director, general manager, or vice-president to do the bargaining. The scout's job has become half-obsolete as his only requirement is to send accurate amateur player reports to his club's front office. The club's management makes the final decisions of whom to select on drafting day.[13]

The establishment of the Major League Scouting Bureau has had its effects upon Baseball's scouting industry as well. The MLSB's impersonal but comprehensive coverage of amateur baseball means that there is less of a need for part-time scouts. The Bureau's existence also has changed the roles of some of the club's employed scouts. A MLSB report is written anonymously so that clubs subscribing to the service find it necessary to send their own scouts to "cross-check" prospective players in person for assured thoroughness. Other clubs contend that the centralized scouting service is overpriced at $100,000 per year and an unnecessary, and sometimes inaccurate, luxury. About one-quarter of the clubs have stubbornly opposed the use of this service since it was established and continue to employ their entire independent scouting intelligentsia.

The Atlanta Braves Example

The scouting system of the Atlanta Braves provides an example of one major league club's scouting methods. Atlanta currently employs 20 scouts, eight of whom are part-time. The Braves had reduced their number of scouts in the mid-1970's but are presently in the process of rebuilding their scouting staff in hopes that the added employment will rejuvenate their club's competitiveness. Like all clubs, the Braves have a reasonably accurate idea of where the most and best amateur

baseball is played and they attempt to locate their scouts in these areas. There is also the tendency for a club to show a local bias to its scouting arrangement. Table III displays the geographic arrangement of Atlanta's scouting staff.

TABLE III

LOCATION OF ATLANTA BRAVES'SCOUTS, 1980

State	Number of Scouts	State	Number of Scouts
Alabama	1	Illinois	1
Arizona	1	Michigan	1
Arkansas	1	New York	1
California	4	North Carolina	1
Dominican Republic	1	Ohio	1
Florida	1	Tennessee	3
Georgia	3		

Part-time scouts, commonly referred to as "bird-dogs" in much of the literature because of their knack of finding the obscure talented prospects, are employed primarily to keep watch over their local areas. Because part-time scouts are usually employed in other work they are not able to do near as much traveling as those employed full-time. Other part-timers tend to be elderly gentlemen who do their work simply because they love the game. Depending upon his historical accuracy of judging prospects, a part-timer may or may not have as much influence

with the club's management as full-time scouts. In the case of the Braves, their scouting director considers his part-time scouts to be equally as accurate and important as those employed on a full-time basis.[14]

A club's spatial organization of scouts, like that of the Braves, suggests that an individual scout has a specific in-state or multi-state territory to cover. It is obvious from the Atlanta example that certain areas of the country are less represented by their scouts. This does not imply, however, that amateurs performing in these unrepresented areas are conceded to other interested clubs. Scouts travel great distances, especially during the spring months, to watch quality amateur baseball wherever it might be played. For instance, many of Atlanta's scouts annually converge on the southern diamonds in March when northern colleges make their trips to Florida and other parts of the South. And, in the winter months a few of the full-timers will visit the Caribbean to aid the one Atlanta scout permanently located there. Like all subscribing clubs, the Braves also acquire a great deal of information about the better domestic amateurs that their own scouts do not see regularly from the Major League Scouting Bureau. The MLSB helps to broaden a subscribing club's coverage area but, in many respects, its existence has made it increasingly necessary for these clubs' scouts to travel long distances. For example, Atlanta attempts to cross-check the MLSB's most highly regarded prospects by three of its own scouts on separate investigations and most other amateurs that the Braves are particularly interested in are cross-checked twice.[15]

FOOTNOTES

[1]Lance E. Davis, "Self-Regulation in Baseball, 1909-71," Government and the Sports Business, ed. Roger G. Noll (Washington, D.C., 1974), pp. 366-67.

[2]Ibid.

[3]National Football League, New York, personal correspondence, October 31, 1978.

[4]National Basketball Association, New York, personal correspondence, January 24, 1979.

[5]Harry Sinden, "A Game That the NHL Can't Win," Sports Illustrated (March 5, 1979), p. 22.

[6]C. C. Johnson Spink, "Comparing the Drafts," The Sporting News (May 26, 1979), p. 14.

[7]Ed Katalinas, Director of Scouting, Detroit Tigers Baseball Club; Paul Richards, Director of Player Development, Chicago White Sox; Al Campanis, Vice-President-Player Personnel, Los Angeles Dodgers Baseball Club; and, Danny Menendez, Director of Scouting, Montreal Expos Baseball Club, personal correspondence, March-April, 1979.

[8]Paul Snyder, Director of Scouting, Atlanta Braves Baseball Club, personal correspondence, February 19, 1980.

[9]Ibid.

[10]Ed Katalinas, personal correspondence.

[11]Roger Angell, Five Seasons: A Baseball Companion (New York, 1977), p. 343.

[12]Ibid., p. 345.

[13]Pat Jordan, "You Can't Beat the Draft," Sports Illustrated (July 27, 1970), pp. 55-56.

[14]Paul Snyder, personal correspondence.

[15]Ibid.

CHAPTER IV

METHODOLOGICAL TECHNIQUES OF THE ANALYSIS

Compiling the Sample

The raw data used in this investigation were compiled by the National Association of Professional Baseball Leagues of St. Petersburg, Florida. Their First Year Player Report, printed 10 times per year for use within Organized Baseball's industry, was the major data source. The data were provided to this researcher through the auspices of Cecil and Associates, a sports consultant agency in Atlanta, Georgia. Additional information came from the Official Baseball Register, published annually by The Sporting News of St. Louis, Missouri, and the Major League Year & Notebook, published annually by Baseball Blue Book, Inc. of St. Petersburg, Florida.

A 100 percent sampling of those players who signed their initial professional baseball contracts during the years of 1965 through 1977 is used for the analysis. This 13 year period was chosen primarily because those years of data were the ones made available to the researcher. Moreover, the sampling period is significant in that it surveys the initial years of the amateur free-agent draft as well as continuing through the time of Professional Baseball's major league expansion in the late 1960's and relative stability of the 1970's. (The American League did add two clubs, Seattle and Toronto, in 1977,

consequently the figures of these two expansion clubs are minimal in this sample.)

The significant information involving every player in the sample includes data indicating: his home address when the initial professional contract was signed (presumably his amateur playing origin); the major league club with whom he signed, and; whether the player later advanced into the major leagues. Of lesser significance is the indication of whether the player signed his professional contract after being selected in the amateur free-agent draft, or rather as a free-agent. Displayed in Figure 1 is one page of raw data concerning the signings of 38 first-year players during 1968. Those players who were found to have later performed in the major leagues are encircled.

A domestic player's origin was coded for computational ease by state, county, and metropolitan area (when applicable). The metropolitan area category employs the United States Census Bureau's classification of Standard Metropolitan Statistical Areas (SMSA). The SMSA includes the county in which a central city of 50,000 inhabitants (or 25,000 under certain circumstances) is located, and adjacent counties that are found to be metropolitan in character and economically and socially integrated with the county of the central city. In New England, the requirement with regard to a central city as a nucleus still holds, but the units comprising the area are cities and towns rather than counties. The census of 1970 listed 243 SMSAs. (A procedure indicating each domestic player's three digit zip code area was also coded but is not used during the analysis.)

Those foreign players included in the sample were grouped as to their nation and, in the case of Canadian players, by province. The

FIRST YEAR PLAYER REPORT NO. 5, 1968
FIRST YEAR PLAYER CONTRACTS OF MAJOR LEAGUE ORGANIZATIONS
APPROVED BY THE NATIONAL ASSOCIATION IN PERIOD
MAY 22, 1968 to July 5, 1968

*Indicates player selected at Free Agent Draft

CLUB	PLAYER	HOME CITY	POSITION
	AMERICAN LEAGUE		
BALTIMORE			
Aberdeen	*Michael Hamm	Rapid City, S.D.	OF
	*George Manz	Baltimore, Md.	RHP
Bluefield	*John Blanchard	Denver, Colo.	C
	*Leonard Finch	Napa, Calif.	3B
	*Conrad Herrmann	Somerdale, N.J.	RHP
	*Jesse Jefferson	Midlothian, Va.	RHP
	*Larry Jones	Kansas City, Mo.	RHP
	Ronald R. Peterson	Rochester, N.Y.	
	Steve Robida	Snyder, N.Y.	3B
	*Lonnie Teasley	Taylors, S. C.	LHP
Miami	*Robert T. Walker	Tampa, Fla.	RHP
Stockton	Ralph J. Manfredi	Roseville, Calif.	
BOSTON			
Jamestown	*Allen Collins	Glendora, Calif.	
	*Michael Collins	Riverside, Calif.	
	*Cecil Cooper	Brenham, Texas	
	*Manuel Crespo	Miami, Fla.	
	Richard D. Darnell	Columbus, Ohio	
	*Michael Harvison	Ft. Worth, Texas	
	Richard G. Jacobs	Woonsocket, R. I.	
	Mike D. Johnson	Buena Park, Calif.	
	*Frank Mannerino	Oak Lawn, Ill.	
	Michael Mazerall	Westbrook, Maine	
	*John S. Moss	Birmingham, Ala.	
	*Thomas Skenderian	Readville, Mass.	
	*Curtis Suchan	Tampa, Fla.	
	*Robert Truskowski	Wayne, Mich.	
	*Roger D. Ward	Ft Lauderdale, Fla.	
	*Richard Wicks	Lake Charles, La.	
Pittsfield	Carl E. Boteze	Pittsfield, Mass.	
Waterloo	*William E. Brown	Fresno, Calif.	
	*Ronald Falls	Santee, Calif.	
	Henry G. Griffin	Merced, Calif.	
	*Lynn McGlothen	Simsboro, La.	
	*Michael R. Neal	Redding, Calif.	
	*Robert Overmiller	Felton, Pa.	
Winston-Salem	*John D. Curtis	Smithtown, N.Y.	
	Henry L. Gracia	Morgan Hill, Calif.	
	*Michael Whitson	Jacksonville, Fla.	

Figure 1. An Example of the Raw First-Year Player Data

home cities of Latin American players were also recorded when that information was available.

Having geographically categorized the players by origin and major league club involvement, the next step was to group and standardize this information. This was done through the use of computer programs written by Dr. Stephen W. Tweedie, Associate Professor of Geography of Oklahoma State University, Stillwater, Oklahoma.

The Location Quotient

In order to properly compare the relative baseball player production capacities of separate geographic areas it is necessary to compensate for the variation in populations. In this research the baseball player production figures are standardized through the use of the location quotient. A location quotient index (L.Q.) indicates the degree to which a localized area's involvement or production figures for some activity vary relative to some other more comprehensive norm, such as figures at a regional or national level concerning the same activity. For this research the standard or norm chosen for relative comparison sake is the number of first-year professional baseball players originating from the United States. All location quotient computation is based upon the 1970 aggregate population totals at the national, state, SMSA, or county levels. Hence, the location quotient indices of this research can be considered as simply per capita production indices.

An area's location quotient index was computed by the use of the following formula:

$$L.Q. = \frac{X_i/X}{Y_i/Y} \qquad (6.1)$$

Where X_i is the number of ballplayers produced in area X,

X is the total population of area X,

Y_i is the number of ballplayers produced in the United States,

and Y is the total United States population.

By using the national rate of production as the divisor the subsequent quotient can be compared to the national production norm, which is equal to 1.00. Any computed index found to be less than 1.00 indicates an area's rate of production to be less than the national rate, whereas an index greater than 1.00 signifies that area's production to be greater than the national norm.

Some caution should be taken when analyzing a location quotient index because of its two inherent weaknesses. Location quotient indices less than the norm are compressed between 0.0 and 1.00 while those indices greater than the norm may rise to any number above 1.00. The other weakness becomes evident when a comparison is being made which involves an area with a very small population base. In a sparsely populated area the production of only a few players can create an abnormally high index value, possibly overemphasizing that place's productive importance. This latter weakness is especially noteworthy during the county level examination.

Three separate location quotients are computed during this research and are given the titles of: "total location quotient," "major location quotient," and "success location quotient." The total location quotient is designed to give an indication of an area's total per capita rate of ballplayer production relative to the total national rate. The resultant total location quotient indices involve the use of every player in the sample.

A national rate of 6.154 players per 100,000 persons signed their initial professional baseball contracts during the 13 sampled years, or approximately one player per 16,249. (This adjusts to an annual average of 4.734 players per one million or one player per 211,238.) The example below shows how the state of New York's total rate of production can be compared to the total national rate:

$$\frac{\text{Number of N.Y. First-Year Players}}{\text{1970 Population of N.Y.}} \quad \frac{762}{18,241,584}$$

$$\frac{\text{Number of U.S. First-Year Players}}{\text{1970 Population of U.S.}} \quad \frac{12,544}{203,810,000}$$

$$= \frac{4.17^{-5}}{6.154^{-5}} = .68 \text{ Total L.Q.} \qquad (6.2)$$

New York's total location quotient index of .68 means that its production rate was only slightly better than two-thirds that of the total national rate. An area that was found to have produced players at a greater than average rate is Puerto Rico which had an index of 1.90, or nearly twice the total production rate of this country.

It is important to note the cases of Puerto Rico and other foreign producing areas. Non-domestic production and population figures are not included in the divisor of the location quotient computation. To include the total populations of every foreign area that sent forth a baseball player would create an underestimation of the relative rate of production. Because the United States produced nearly 90 percent of the total players in the sample only this country's rate of production is used as the comparative rate.

This research also determines a producing area's rate of only its highest quality players. To do so the identical computation is performed as in the total location quotient example, but during this

procedure only those "major players" are included. In this case a "major player" is one who had advanced to the major leagues and appeared in at least one game at that level of competition by October of 1978. This procedure's areal per capita index of production is entitled the "major location quotient." The major location quotient is based upon a national rate of 5.69 major league players per one million.

A final statistic is computed for each producing area entitled the "success location quotient." This statistic is produced by dividing an area's major location quotient by its total location quotient. The success location quotient proves to be a revealing statistic as it provides a comparison between an area's successful production index versus its total production index. A success location quotient index of greater than 1.00 suggests that more of an area's players had advanced into the major leagues than was expected relative to the national rate. Conversely, a success location quotient index of less than 1.00 indicates a poorer than expected rate of successful advancement.

Annual rates of production at the state level are also determined in an attempt to discover any ongoing production trends during the 13 year sample. This is done by calculating annual total location quotient indices. The charting of these indices over the 13 year period provides an indication of an area's increasing, decreasing, random, or relatively stable production of first-year players.

Illustrative Techniques

The spatial variations of baseball player production capacities are depicted and analyzed through the use of a selection of maps,

tables, and graphs. The various location quotient indices previously described are the vital statistics in the majority of these illustrations and tables.

CHAPTER V

AN ANALYSIS OF THE TOTAL SAMPLE OF FIRST-YEAR PLAYERS

Introduction

The game of baseball has been labeled "America's national pastime" since its early existence. Whether the game continues to be held in that esteem is not to be debated here, but another question does arise from the boastful statement that essentially is the crux of this thesis. Is baseball's presence equally important throughout the entire continent? One of the best ways to measure a sport's geographic variation of importance is through the use of participatory data. If a sport is considered to be proportionately significant throughout an area, one might expect to find a spatially uniform pattern of individuals participating in the sport. The next three chapters geographically analyze various aspects of high quality baseball participation. The first of these three chapters examines a 13 year sample of amateur baseball players who became professionals. The athletes of this sample are heretofore entitled Professional Baseball's "first-year playes."

13,985 individuals became first-year professional baseball players during the years 1965 through 1977. 12,544 of these players, or nearly 90 percent, were residents from the United States. A foreign contingent of

1,441 players was comprised primarily of Canadian and Latin American athletes. The American players were categorized by their state, county, and, when applicable, metropolitan origin. The foreign players were analyzed only by their national origin. (Throughout this analysis a foreign nation's production will be compared with that of the state level domestic production.)

Analysis at the State Level

A ranking of 10 producing states on the basis of total output exhibits California's predominance (Table IV). That state produced nearly 22 percent of the sample's total number of players, practically as many as the next five ranked areas combined. The strong ranking of the Dominican Republic in this list gives some indication of baseball's importance in Latin America and, had the list been lengthened to include the eleventh ranked area, Puerto Rico's inclusion would have further substantiated this fact. (For the complete production figures of every state and foreign producer see Appendix A.)

The ranking of states by virtue of their total production figures is of some interest, but that type of procedure does not provide the means for a relative or per capita production comparison. Because there is an inherent correlation between the total number of baseball players produced and an area's population figures, those areas having the larger populations naturally send forth more players than the lesser populated areas. Thus, it is necessary to employ a comparative statistic that takes into account an area's population base. The statistic in this case is the location quotient. Throughout the remainder of this research the location quotient can be regarded as a

simple per capita measurement. Because this chapter examines the total sample of first-year players the corresponding statistic is entitled the "total location quotient" or "total L.Q." (The procedure used to derive the location quotient is detailed in Chapter IV.)

TABLE IV

LEADING STATES PRODUCING PROFESSIONAL BASEBALL'S FIRST-YEAR PLAYERS, 1965-1977

Rank	State	Number of Players	Percent of Total (13985)
1.	California	3066	21.9
2.	New York	762	5.5
3.	Florida	678	4.8
4.	Pennsylvania	597	4.3
5.	Dominican Republic	548	3.9
6.	Texas	545	3.9
7.	Illinois	542	3.9
8.	Ohio	501	3.6
9.	New Jersey	438	3.1
10.	Michigan	422	3.0
Top 10 Total		8099	57.9%
All Others		5886	42.1
Total		13985	100%

A general pattern of baseball player per capita productivity is provided by a choropleth map of the total location quotient indices at the state level (Figure 2). This type of mapping helps to compare quantitatively an area's productivity relative to other areas and to the national production norm. Also, certain broad regionalizations can be made with the use of this mapping technique. (Figure 2 and the subsequent state figures involving data at this level of aggregation are based upon 60 areal units. Each of these 60 areas produced a minimum total of 13 first-year professional players, an average of at least one per year.)

California is the only domestic area which furnished players at a rate of more than twice the national norm. Four Latin American areas also are in this category. The next highest class of productivity includes Florida, Nevada, Arizona, and Puerto Rico. Thus, only nine areas from a total of 60 produced ballplayers well above the national average. A majority fall within the next two categories of production, that of surrounding the national norm or being one class below normal. Eight areas are included in the lowest producing category. These state figures provide some superficial evidence that the production of professional baseball players is, at least partially, ubiquitous in nature. That is, although there may be a spatially variable production pattern the game seems to have some significance throughout the continent.

Based on a regional examination additional comments can be made concerning the mapped data: The extreme southwestern United States is an area of great baseball involvement as is much of Latin America; but for Oklahoma and Missouri's near normal production, the vast midsection of the country does not approach the national productivity rate, and;

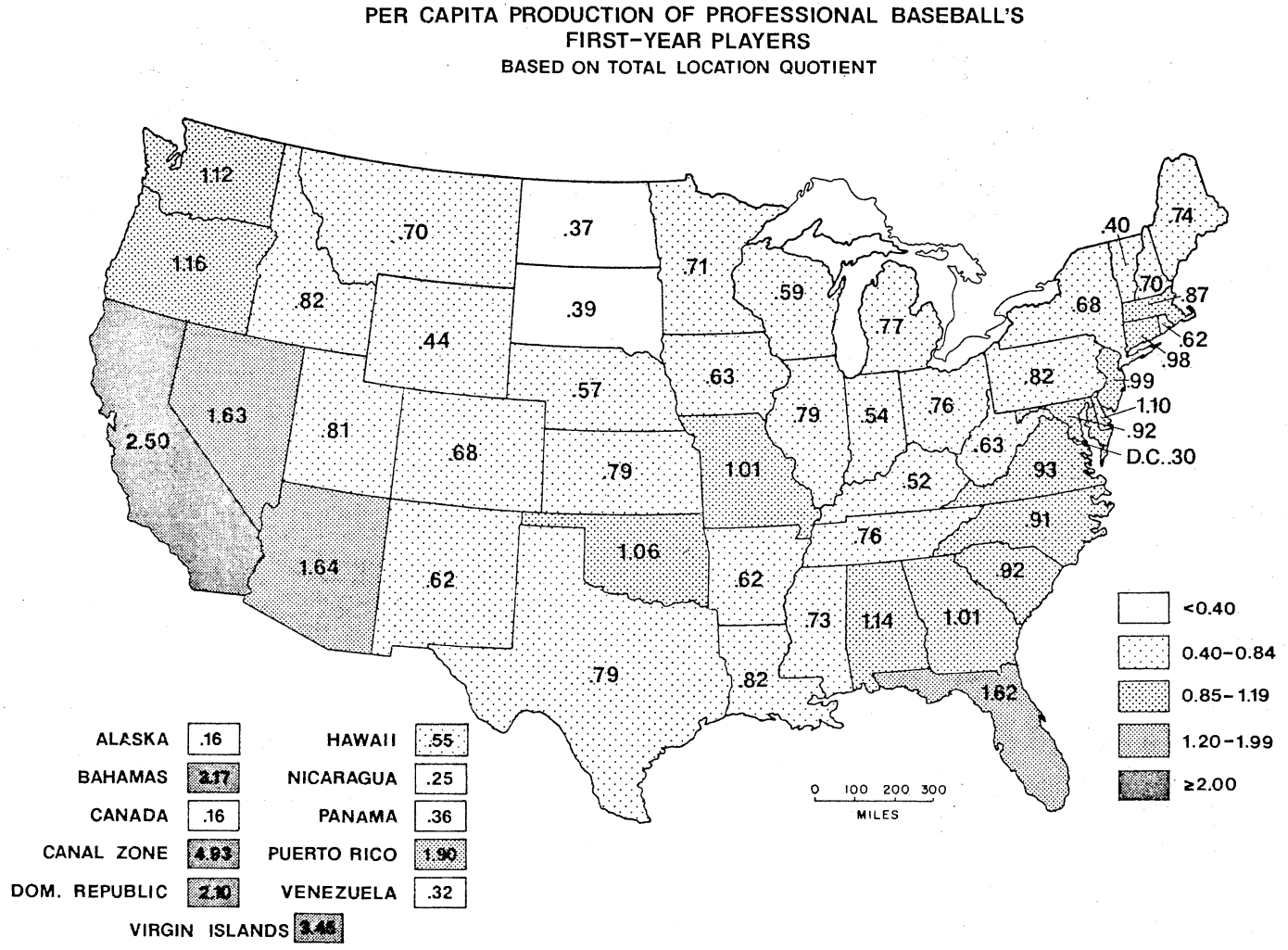

Figure 2. Per Capita Production of Professional Baseball's First-Year Players

the coastal states, both east and west, show similar characteristics. This last point is deserving of further comment. Disregarding the California and Florida anomalies and a low yield from northermost New England, the coastal production is uniquely uniform. Oregon and Washington are near equal in production and many of the Atlantic coastal states are comparable as well. The indices of the Carolinas, Virginia, and Maryland vary by only .02, indicating an especially strong regional uniformity in that portion of the Southeast.

Analysis at the County Level

The state total location quotient indices present a general picture of baseball player production but analysis at the state lvel of aggregation leaves much to be desired. A look at the within-state variability of production is required if a more localized examination is to be conducted. This within-state detail is provided when the data are examined at the county level. (In most cases no comparable political divisions were available for the foreign areas so only the United States is included in this procedure.)

A more intricate illustration is produced when the total location quotient is mapped by county (Figure 3). The more localized pattern points out that a considerable number of counties did not produce a single player during the sampling period. Many of these non-producing counties are located in the lesser-populated Great Plains and Rocky Mountain regions. Also, a substantial portion of western Appalachia (West Virginia, Kentucky, and Tennessee) was not at all productive. States in the Northeast tended to have a higher percentage of producing

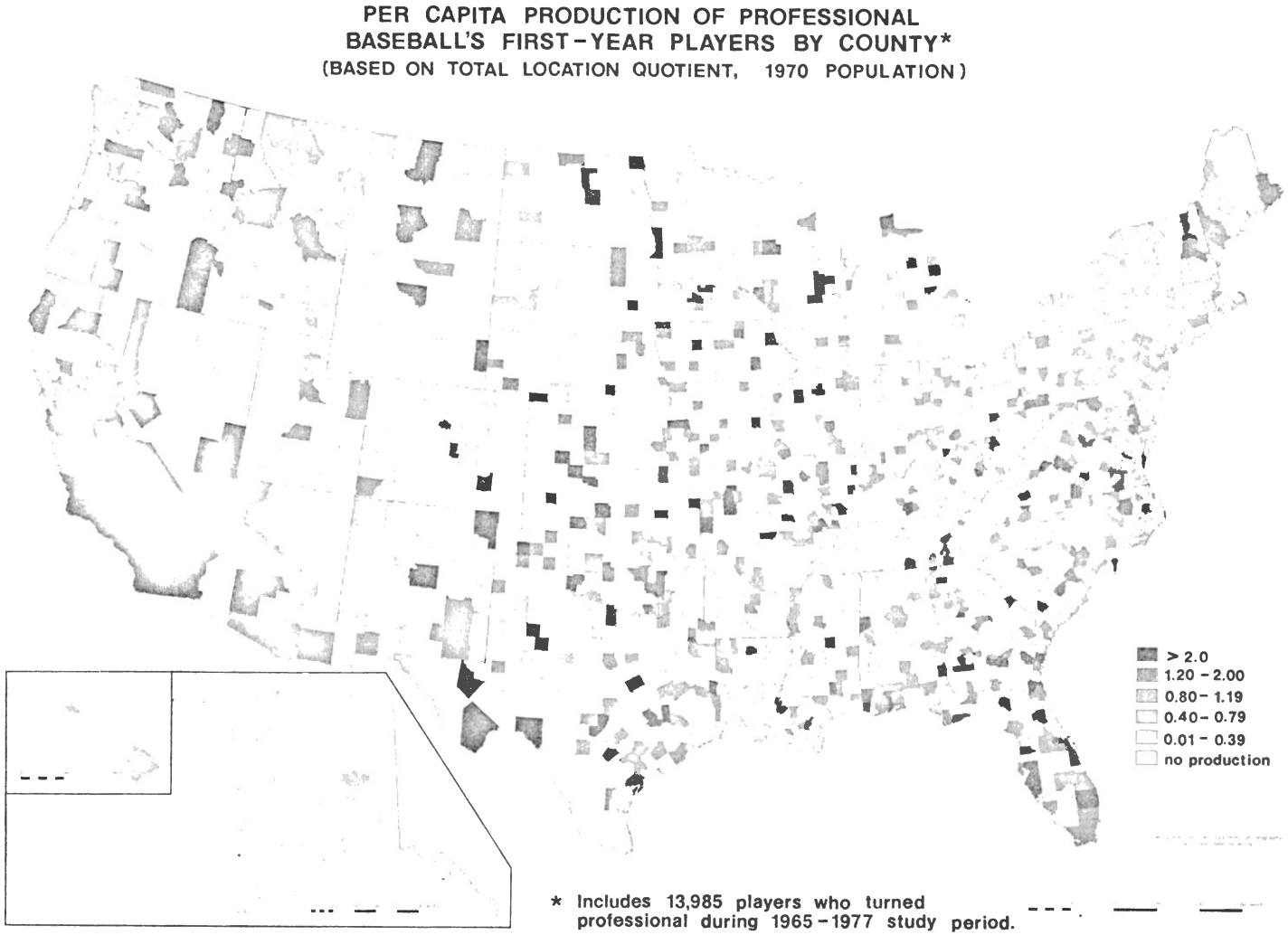

Figure 3. Per Capita Production of Professional Baseball's First-Year Players by County

counties and a somewhat more uniform pattern because of their smaller size and larger populations.

The county based map indicates that California's most productive areas are located in the southern half of the state. Nearly every county from San Francisco southward to the Mexican border produced at a rate of at least twice the national norm. Northern California shows no similar uniformity. In fact, some of these counties sent forth players at less than the national rate or produced none at all. The other westernmost continental states show a wide range of randomly scattered production rates within each state. In the South much of coastal Florida is producing well above the national average but most of the Deep South has a scattered production pattern. A majority of Deep South counties produced below the national rate or were non-producers.

Those producing counties found in the lowest category of production are significant in that they most accurately show where there is a relatively high population base and a low production rate. Although this type of county is scattered throughout the country, the majority are located in the northeastern quadrant, the greatest concentration being in those states near the Great Lakes. The Great Lakes region also has a considerable number of moderately low producing counties. Hence, this region appears to be the poorest overall producer of those areas having a substantial population base.

A brief summary of the leading per capita producing counties further pinpoints those individual places that have trained some of today's professional ballplayers. A ranking of the top 25 counties based upon their per capita rates of production indicates that a vast

majority of the best producing areas are located in the southern half of the United States (Table V). California has the most counties in this table's rankings (5), no other state can claim more than two. The California counties were also the highest total producers of those listed. The production figures of Orange, Sacramento, and Fresno counties are especially noteworthy. (In order for a county to be considered for ranking in Table V a minimum production requirement of four players was necessary. This criterion increased the probability that only those counties which had traditionally supported quality amateur baseball might be ranked.)

While one might expect to find a producing county's index to be similar to its respective state's index, that is not always the case. A few abnormally disparate county-state comparisons, especially examples involving Kentucky and Texas, are worthy of mention. Kentucky's total location quotient of .52 strongly suggests that baseball is not a popular participatory sport within that state. The Texas index of .79 tells much the same story to a lesser degree. However, each of these states can claim two of the counties listed in the top 25 producing counties. In fact, the two Texas counties are ranked in the top six. The fact is that a high degree of local participation and subsequent production is possible anywhere in the country. Whereas the large preponderance of Texas and Kentucky populations seemingly do not promote local amateur baseball, the communities in and around Caldwell, Brenham, Paintsville and Glasglow evidently have supported their amateur programs quite well.

TABLE V

LEADING COUNTIES BASED ON PRODUCTION RATE
OF FIRST-YEAR PLAYERS*

Rank	County, State	Total L.Q.	Number of Players	Leading City
1.	Burleson, Texas	8.12	5	Caldwell
2.	King George, Va.	8.08	4	Dahlgren
3.	Lincoln, La.	5.77	12	Ruston/Grambling
4.	Johnson, Ky.	5.56	6	Paintsville
5.	Terrell, Ga.	5.69	4	Dawson
6.	Washington, Texas	5.17	6	Brenham
7.	Asotin, Wash.	4.71	4	Clarkston
8.	Southampton, Va.	4.37	5	Courtland
9.	Lamar, Miss.	4.27	4	Lumberton
10.	Franklin, Tenn.	4.17	7	Winchester
11.	Carson City, Nev.	4.16	4	Carson City
12.	Bamberg, S.C.	4.07	4	Bamberg/Denmark
13.	Merced, Calif.	4.04	26	Merced
14.	Clinton, Ill.	4.02	7	Carlyle
15.	Pickens, Ala.	4.00	5	Aliceville
16.	Newton, Mo.	3.95	8	Neosho
17.	Sacramento, Calif.	3.63	141	Sacramento
18.	Indian River, Fla.	3.61	8	Vero Beach
19.	Lincoln, Mo.	3.60	4	Troy
20.	Fresno, Calif.	3.58	91	Fresno
21.	Pontotoc, Okla.	3.50	6	Ada
22.	Monroe, Ill.	3.45	4	Waterloo
23.	Barren, Ky.	3.40	6	Glasgow/Cave City
24.	Solano, Calif.	3.25	34	Fairfield
25.	Orange, Calif.	3.24	283	Anaheim

*Counties needed to have produced four or more players to have been considered.

Analysis of Metropolitan Areas

Many of those counties ranked in Table V are comprised of small, rural populations so that, although these counties produced at incredibly high rates, they actually did not send forth a large total number of players. Obviously, it was the large cities that provided most of the players for Organized Baseball's clubs (Table VI). The 25 largest total producing metropolitan areas (or SMSAs) can claim over 40 percent of the total domestic production. The largest single producer was Los Angeles which produced 1,152 players or over nine percent of the country's total. No other SMSA came close to matching Los Angeles' total production. On a per capital basis the Los Angeles production rate is better than two and one-half times the national norm. The California SMSAs of Anaheim, Sacramento, and San Diego all produced at even greater rates, and seven of the leading nine per capital producing metropolitan areas are located in California. Of those urban areas that produced at a rate above the national norm only three - Cincinnati, Kansas City, and St. Louis - can be regarded as northern cities, and even these border on areas of southern culture.

Some of the heavily populated urban areas of the Midwest nad Northeast were important total producers, yet their rates of production were generally found to be below the national norm. However, upon closer inspection it is apparent that many of these northern SMSAs are equaling or exceeding their respective home state's production index. Detroit far surpassed the Michigan per capita index and Boston, Chicago, and Pittsburgh produced better than did Massachusetts, Illinois, and Pennsylvania respectively. Also, the SMSA of New York was no burden on its state's total production index as their rates were identical.

TABLE VI

PRIMARY FIRST-YEAR PLAYER PRODUCING METROPOLITAN AREAS*

Rank (Based on Total L.Q.)	SMSA, State	Total L.Q.	Number of Players	Rank (Based on Number of Players)
1.	Anaheim, Calif.	3.24	283	5
2.	Sacramento, Calif.	3.23	159	10
3.	San Diego, Calif.	2.70	226	7
4.	Los Angeles, Calif.	2.66	1152	1
5.	San Jose, Calif.	2.30	151	13
6.	Tampa-St. Pete., Fla.	2.26	141	15
7.	San Bernardino, Calif.	2.22	156	11
8.	Phoenix, Ariz.	2.02	120	18
9.	San Francisco, Calif.	1.84	352	3
10.	Miami, Fla.	1.82	142	14
11.	Cincinnati, Ohio	1.45	124	17
12.	Atlanta, Ga.	1.31	112	21
13.	Kansas City, Mo.	1.30	100	24
14.	St. Louis, Mo.	1.11	162	9
15.	Seattle, Wash.	1.13	100	24
16.	Detroit, Mich.	.98	252	6
17.	Houston, Texas	.95	116	20
18.	Newark, N.J.	.92	105	23
19.	Boston, Mass.	.90	153	12
20.	Baltimore, Md.	.85	107	22
21.	Pittsburgh, Pa.	.84	126	16
22.	Chicago, Ill.	.80	345	4
23.	Philadelphia, Pa.	.70	207	8
24.	New York, N.Y.	.68	483	2
25.	Washington, D.C.	.68	120	19

*Includes all SMSAs producing a minimum of 100 first-year players during the study period. See Appendix B for full SMSA titles.

There are other large cities, a preponderance of them located in the Midwest and Northeast, that do not at all compare with those mentioned on the following page (Table VII). These 16 low-producing SMSAs each have populations in excess of one-half million and produced at rates well below their respective home state's index. Cincinnati's strong ranking among the highest producing cities is further impressive when one realizes how weak its neighboring metropolises were in producing ballplayers. Columbus, Indianapolis, and Louisville all are approximately 100 miles from Cincinnati and none of them show any resemblance to the Queen City's ability to nurture first-year baseballers. This example further suggests the importance of local support, or its lack thereof, in determining a community's productive capability, and cautions one to be extremely careful when attempting to regionalize the country's baseball player production.

Other relatively high producing metropolitan areas not previously mentioned must also be cited (Tabel VIII). While these urban areas have produced less than the largest suppliers on the basis of total output, each deserves recognition by virtue of its per capital rate of production. (But for Birmingham, every city in Table VIII had a 1970 population of less than one-half million inhabitants.)

An examination of the lesser producing but high ranking urban areas reveals once again that a preponderance of California cities dominate the list. Moreover, a western and southern bias is evident, as only three of the 24 cities - Trenton, Decatur, and Portland, Maine - have distinctive northern locations. Of these three anomolies, Portland's statistics are especially startling. Situated in a state which produced at less than three-quarters the national average, this

TABLE VII

HEAVILY POPULATED, LOW FIRST-YEAR PLAYER PRODUCING METROPOLITAN AREAS*

SMSA, State	Total L.Q.	Number of Players	State's Total L.Q. Minus (-) SMSA's Total L.Q.
Springfield, Mass.	.76	25	.08
Philadelphia, Pa.	.70	207	.12
Hartford, Conn.	.68	28	.30
Washington, D.C.	.68	120	.25
Columbus, Ohio	.64	36	.12
Cleveland, Ohio	.60	76	.16
Syracuse, N.Y.	.59	23	.08
Rochester, N.Y.	.59	32	.09
Dallas, Texas	.58	56	.21
Grand Rapids, Mich.	.57	19	.20
Providence, R.I.	.56	32	.06
Honolulu, Hawaii	.49	19	.06
Louisville, Ky.	.45	23	.07
Indianapolis, Ind.	.44	30	.10
Milwaukee, Wis.	.37	32	.22
Akron, Ohio	.29	12	.47

*Includes all SMSAs with a population exceeding one-half million, a total L.Q. index of less than .80, and, an SMSA total L.Q. index of .05 less than respective home state's total L.Q. See Appendix B for full SMSA titles.

TABLE VIII

LEADING LESS-POPULATED METROPOLITAN AREAS BASED ON PRODUCTION RATE OF FIRST-YEAR PLAYERS*

Rank	SMSA, State	Total L.Q.	Total Players Produced
1.	Fresno, Calif.	3.58	91
2.	Bakersfield, Calif.	3.11	63
3.	Springfield, Mo.	2.97	28
4.	Vallejo, Calif.	2.87	44
5.	Portland, Maine	2.64	23
6.	Santa Barbara, Calif.	2.52	41
7.	Stockton, Calif.	2.52	45
8.	Mobile, Ala.	2.46	57
9.	Oxnard, Calif.	2.46	57
10.	Pensacola, Fla.	2.27	34
11.	West Palm Beach, Fla.	2.24	48
12.	Decatur, Ill.	2.21	17
13.	Waco, Texas	2.09	19
14.	Modesto, Calif.	2.00	24
15.	Wilmington, N.C.	1.97	13
16.	Birmingham, Ala.	1.85	84
17.	Eugene, Ore.	1.83	24
18.	Tucson, Ariz.	1.80	39
19.	Asheville, N.C.	1.79	16
20.	Tulsa, Okla.	1.70	50
21.	Orlando, Fla.	1.67	50
22.	Las Vegas, Nev.	1.66	28
23.	Trenton, N.J.	1.66	31
24.	Spokane, Wash.	1.53	27

*Includes all SMSAs producing less than 100 first-year players at a rate greater than 1.5 of national norm. See Appendix B for full SMSA titles.

city sent forth 23 professional players, a rate constituting more than two and one-half times the national norm. Again, evidence of a community's involvement overshadowing its surrounding regional tendency.

Analysis of Foreign Producers

Canada and much of Latin America are two distinct foreign regions that supply a significant number of ballplayers to Organized Baseball's ranks. The Canadian supply is small relative to its population throughout each of its provinces, whereas the Latin American region is comprised of nations producing players at widely varied rates. Extremely limited production also occurred in Japan, Australia, Taiwan, Holland, and South Africa. The combined total foreign production of first-year players equaled 1,441 players, 10.3 percent of the entire sample's total.

Canada produced 212 players during the sampling period, a total nearly comparable with the state of Maryland. Based on per capita production its extremely low index of .16 was identical to Alaska's production rate. Canada's largest total producing province was Ontario (99 players); its highest per capita producer was British Columbia (.34). Despite these relatively low production figures, Canada's current involvement within Baseball's realm is notable. It was the third largest foreign producer and presently houses two major league and five minor league franchises.

Since the 1940's when the Washington Senators signed a few light-skinned Latins to fill their war-depleted roster, Latin America's importance to Organized Baseball has grown dramatically. This loosely defined Spanish-speaking region centered around the Caribbean Sea

exported 1,212 players during the sampling period, 84 percent of the entire foreign total. This significant supply of players has encouraged some scouts to regularly visit the region, or, in a few cases, to base themselves there in order to find the best prospects. And, because foreign players are not subject to the amateur-free-agent draft, a scout working outside of the United States can again experience the freedom and individuality that made his job so exciting during the bonus-baby years. The following excerpt describes the phenomenon of reborn scouting practices quite well.

> The Caribbean is the last place for scouts and their teams to find unknowns, to put their ken and pride on the line in a free-bid market, to scuffle and con, even deceive one another. It is a glorious anachronism and a last hurrah for the baseball regulars who were brought up in that wheeler-dealer world.[1]

The Dominican Republic, Puerto Rico, and Venezuela are the primary suppliers located in this region producing nearly 90 percent of the Latin American total. Both the Dominican Republic and Puerto Rico produced players at approximately twice the United States' per capita rate while the more heavily populated nation of Venezuela had a total production index of only one-third our national norm. The Dominican Republic is the single-most dominant foreign producer. Its cities of San Pedro de Macoris and Santo Domingo were found to be the most common Dominican player origins. Puerto Rican players came from a wide variety of places, Carolina and Ponce being the most prevalent. A majority of the Venezuelans included no precise local origin data, consequently no specifics regarding common Venezuelan player origins is possible. The Bahamas, Nicaragua, Panama, the Canal Zone, and the Virgin Islands act as secondary Latin suppliers. Each of these areas

exported an average of one or more players per year. A few players also originated from Colombia, Aruba, Costa Rica, Cuba, Guatemala, and Mexico.

Two of these Latin American countries which greatly support baseball but currently export practically none of their players to Organized Baseball's system are Cuba and Mexico. These two nations provide examples of politics and nationalism interfering with the movement of talented athletes to a higher level of competition.

Cuba was most responsible for supplying the Spanish-speaking major leaguers during the 1950's and early 1960's as nearly 100 native Cubans reached the major leagues. During much of this time Havana was affiliated with American's Triple A International League, a circumstance which naturally promoted the movement of baseball players from Cuba to the United States. Cuba's baseball enthusiasm has continued to the present but, since the revolution two decades ago led by Fidel Castro's communist regime, its involvement with Organized Baseball has totally ceased.[2] (One player was assigned a Cuban origin during the study period due to the lack of additional information. The player gave Guantanamo Bay, an American owned armed forces base on the island of Cuba, as his address.)

Despite Mexico's 1970 population of over 49 million inhabitants, few of its native youth truly excel in the sport. Mexico's production of ballplayers remains unimpeded politically but other factors enter into the reason for so few Mexican's playing professional baseball in the United States. Reasons advanced by baffled scouts include poor diet, interest in other sports, and a general lack of societal support for professional sports.[3] Also, Mexico does have a professional

baseball system of its own and nearly every Mexican youth who is talented enough chooses to play ball in his native country, at least during his earliest professional years. Thus, only one Mexican player was included in the sample's list of first-year professional players. A different sampling of all those players on a major league club roster prior to the 1978 season showed that out of a total of 1,108 ballplayers, 12 had matriculated from the professional Mexican leagues.[4]

Toward an Explanation of the Total First-Year Player Production

An analysis of the origins for all of the sampled players strongly suggests that there are two variables which help to promote the production of baseball players. These variables are climate and community. And, whereas the climate variable would seem to be somewhat dependent upon successfully interacting with the community in order to create an area of high production capacity, the community variable appears able to act independently toward producing a great many ballplayers.

The climate variable is quite apparent. A vast majority of the best producing areas are located where there is a significant amount of warm weather. California's dominance during the sample period most obviously points out the importance of a temperate climate, but there are other examples that also indicate the connection between climate and the production of talented baseball players. A few Latin American nations and a large number of domestic southern cities and counties were found to be excellent total and per capita producers of first-year players, further signaling the relationship. And, approaching the climate variable from a negative standpoint, the greatest concentration

of low producing areas was found clustered in the Midwest, Northeast, and throughout Canada.

The fact is that the most reliable way to become a well trained athlete of any sport is to continually practice the necessary fundamentals. This simply cannot be done in areas of the country that annually receive snow and freezing temperatures. Thus, the comparative advantage shifts to those willing athletes in the seasonally warmer climates, where the honing of skills is more easily achieved on a year-round basis.

This is not to say that athletes from Michigan, Wisconsin, Minnesota, and other northern states cannot become talented enough to interest the professional baseball scouts, because they have and continue to. But these young men need an advantage too, and most of them probably realize it through plenty of hard work with the encouraging support of their communities, the second, and probably most important, variable.

There are many ingredients involved within the idea of a community's assistance in the production of baseballers. Community support is a general term which can include the local society's attitudes toward baseball and the willingness of its businesses and individuals to financially sponsor amateur baseball. The quality of a community's playing facilities subtly reveals the degree of local societal interest and the amount of attention paid toward the amateur teams in the vicinity by the local media can be used as a measure of community involvement.

It is probably safe to say that nearly every American town provides some form of Little League Baseball for its local youngsters.

This makes the presence of Little League Baseball a virtually meaningless measure of local baseball involvement. The hinging factor of the community variable becomes the amount and quality of the programs that are made available to the more physically mature adolescent. Rooney has stated that the amount of high school sponsored baseball is a relatively insignificant indicator of the origins of quality baseball talent. Rather, it is the other forms of competitive involvement such as Babe Ruth and Connie Mack Leagues and American Legion sponsorship that help to determine an area's propensity for producing talented amateur ballplayers.[5]

Another ingredient that should not be overlooked is a community's quality of coaching. Although professional scouts may regard a certain amateur's weaknesses as repairable through stiff major league training, thereby signing the player as a potentially high risk candidate, a talented, fundamentally sound amateur athlete will attract more scouts and a bigger signing bonus.[6]

There is a reason to believe that the presence of other intensively popular local sports negatively influences a community's baseball player production. Rooney has determined where quality high school football and basketball reign supreme within the country.[7] Using Rooney's distinctive sport regions as examples it appears that most of these areas are comparatively poor producers of baseball players. Given the relatively warm climate of football-crazed Texas, one would expect to find reasonably high baseball production throughout the state. Texas did have a few excellent producing counties but its overall baseball production was disappointing. To the north, much of Pennsylvania, West Virginia, and Ohio also have been consistently

strong in high school football. This same area is an ordinary to mediocre supplier of baseball talent. The neighboring metropolitan areas of Akron and Canton, Ohio are especially good examples of places that so highly emphasize football that their quality baseball participation consequently suffers. The same can be said of areas in Illinois, Indiana, and Kentucky with regard to their overemphasis of basketball. One region that has been shown to support both high school football and basketball quite well does not conform to this idea of under emphasizing baseball. This area is southern California, the greatest producer of quality amateur baseballers. So, as has been the case throughout this analysis, this section of the country continues to break all the rules.

Many of the community involvement measures previously mentioned are probably at least partially dependent upon the community's past history of baseball sponsorship. A town or city that sponsored a successful professional or semi-professional team during the first half of this century (when baseball was practically the only professional sport played) is no doubt more likely to support amateur baseball at the present than one having little or no past baseball tradition. Accordingly, a community rich with baseball tradition at any level of competition will place a far higher value upon continuing to maintain baseball's existence than those towns that have never formed a friendship with the sport.

It is not totally clear whether the present existence of a professional baseball team is a significant determinant of an area's producing capacity. On the surface it would appear that the presence of a major league franchise has some positive effect. Most of the 20

major league cities in this country had total location quotient indices that were either greater than the national norm or of their respective home state. (The major exceptions to this are Cleveland, Milwaukee, and Philadelphia.) But, it is necessary to be cautious when analyzing the individual production performances of many major league cities. Some major league organizations have an affinity for signing a great number of home-town boys. A club might choose to sign many local players because it is an inexpensive scouting method but more likely the practice is performed as a public relations gesture. The home club is a vital cog in the community and having a few home-grown players within its organization only helps to promote local interest. Plus, if one of the local boys should happen to successfully advance to the major league club, the club has assured itself of increased home city support.

There is less of a relationship between a professional baseball city at the minor league level and its local production performance. At the Triple A minor league level, 10 of the 26 cities provided first-year players at comparatively mediocre rates. The 10 low producing minor league cities were: Albuquerque, Columbus, Des Moines, Indianapolis, Providence, Rochester, Syracuse, Tacoma, Toledo, and Springfield, Illinois. There are nearly 100 more cities that house lower level minor league ball clubs. This large number makes it difficult to generalize their effect upon the production of talented amateur players but in some cases the presence of one of these clubs might be a primary factor in encouraging a maintenance of quality amateur programs. A few selected examples of very good production in lower level minor league cities include: Eugene, Tulsa, Asheville,

Chattanooga, and Paintsville, Kentucky.

It is also impossible to objectively determine the influence that Organized Baseball might have upon those training camp communities that act as a home for more than a month each spring to the 26 major league clubs. A relatively high proportion of baseball players originate from these cities of Florida and from Phoenix and Tucson in Arizona. Yet, the inherent good climate of these places has to be considered as a major determining factor. Also, caution is necessary when examining the first-year player production rates of those lesser populated counties and cities that house major colleges and universities. These figures may be inflated, not showing the community's actual emphasis of amateur baseball. Because there is an increasing percentage of players being signed off of college campuses each year, a college town's production may be overestimated. In most cases those players that were signed out of college indicated their home origin as being their parent's home. However, there are probably instances when the player breaks off his ties to that prior community, subsequently claiming his college address as home.

An Analysis of Production Trends

The total first-year player sample was also examined on an annual basis in order to determine any ongoing geographic production tendencies. Each state and principal producing foreign country was classified into one of four possible groups depending upon its production trend during the 13 year sampling period. The four groups were entitled: increasing, decreasing, stable, and random. To be categorized as "increasing" it was necessary for an area to show a relatively steady

gain in its total location quotient index from the early to latter stages of the sample. Conversely, "decreasing" areas revealed noticeable declines in their total indices and "stable" areas were ones which basically provided a constant supply of players. Finally, those states classified as "random" had a deviation of more than 1.0 between their minimum and maximum total location quotient indices while indicating no steady increase or decrease in production during the period. When each state had been classified into one of these four groups it was possible to examine for geographic implications and patterns of the spatial distribution (Figure 4).

The mapping of these four various trends indicates that a major portion of the United States experienced no substantial change in its production throughout the period. The dispersed distribution of stable producers has its heaviest concentration in many of the more densely populated states of the Midwest and Northeast. Illinois is an example of a constant primary producer (Figure 5). Canada was another relatively stable producer (Figure 6). The Canadian graph is especially intriguing considering the fact that Montreal's major league franchise which began in 1969 seems to have stimulated no additional production from the country.

Those areas that expanded their production are found in warm weather locations. This suggests that the aforementioned climate variable is becoming an increasingly important factor related to the production of ballplayers. Florida's annual production graph is a prime example of increased productivity (Figure 7). Despite its amenable climate, much of Latin America more than likely increased its production simply because Baseball's management began to recognize the

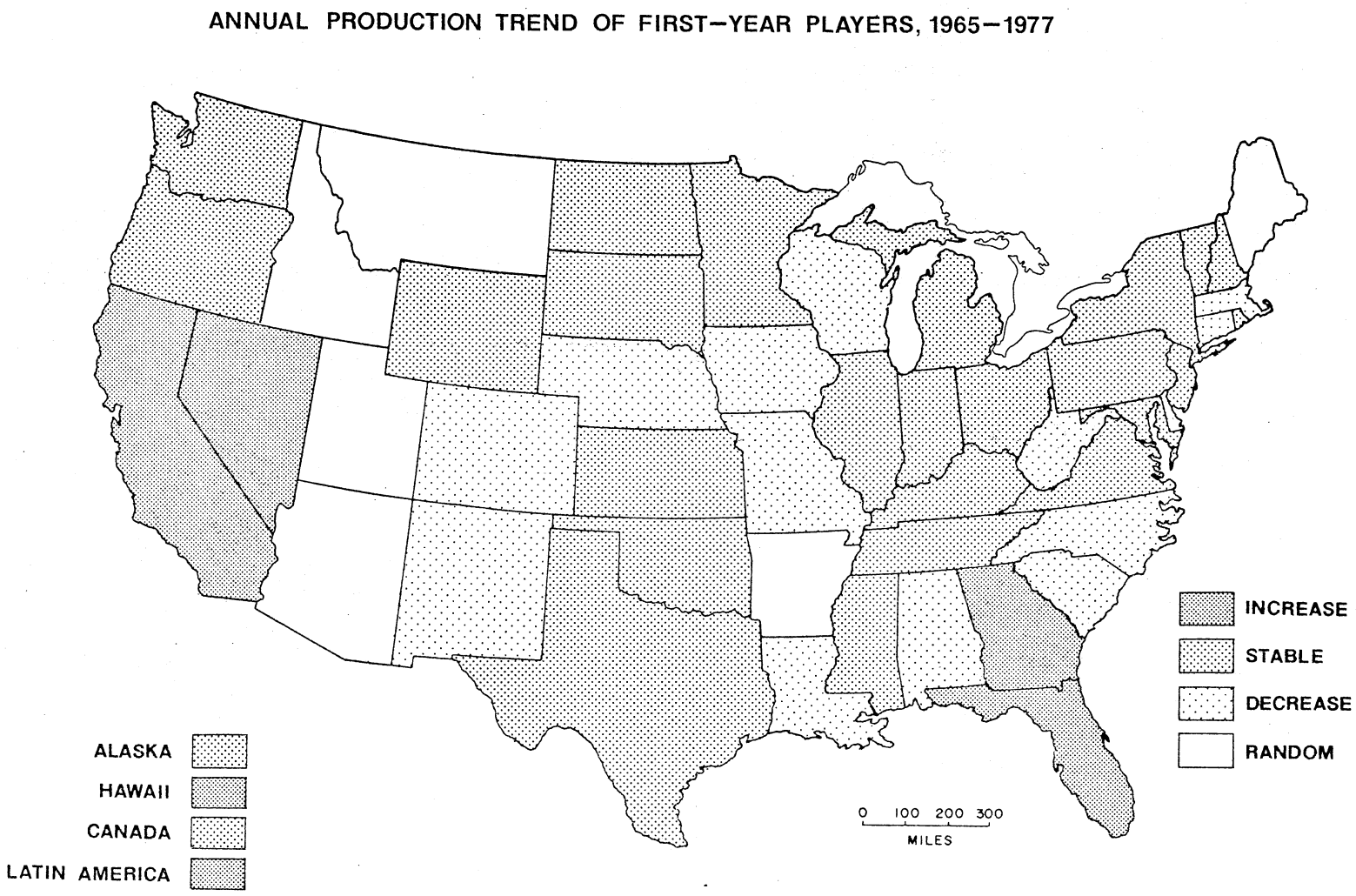

Figure 4. Annual Production Trend of First-Year Players

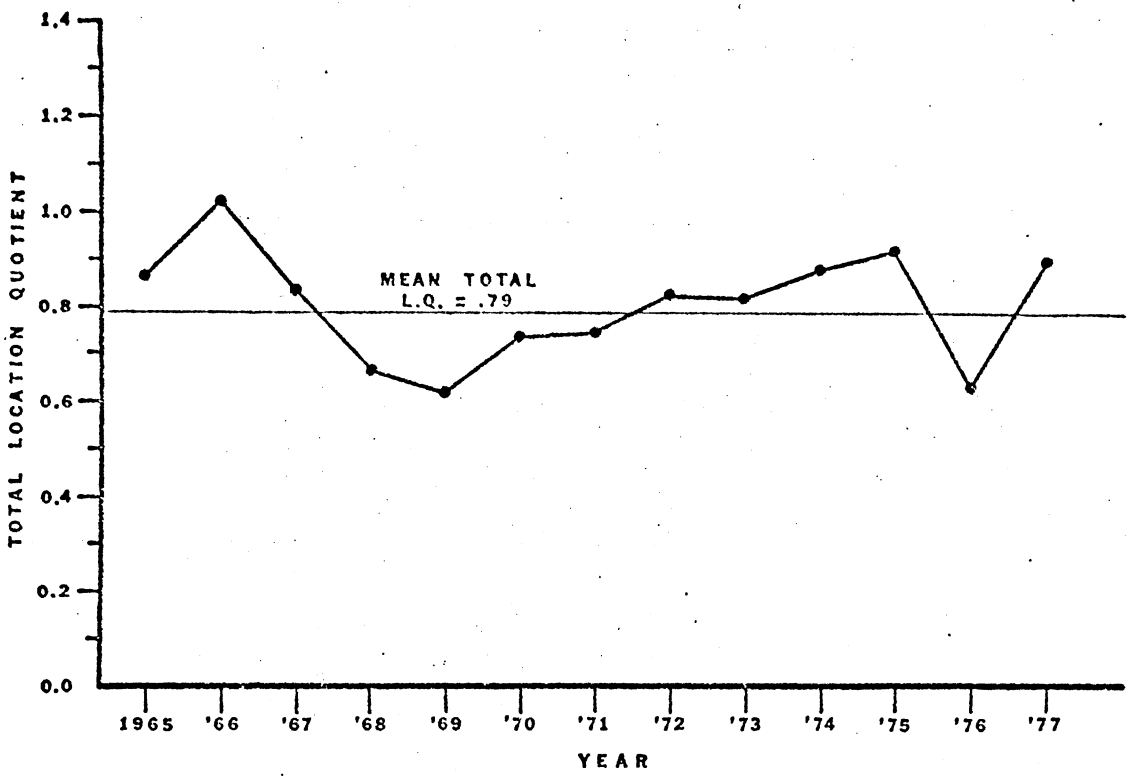

Figure 5. The Stable Production Trend of Illinois

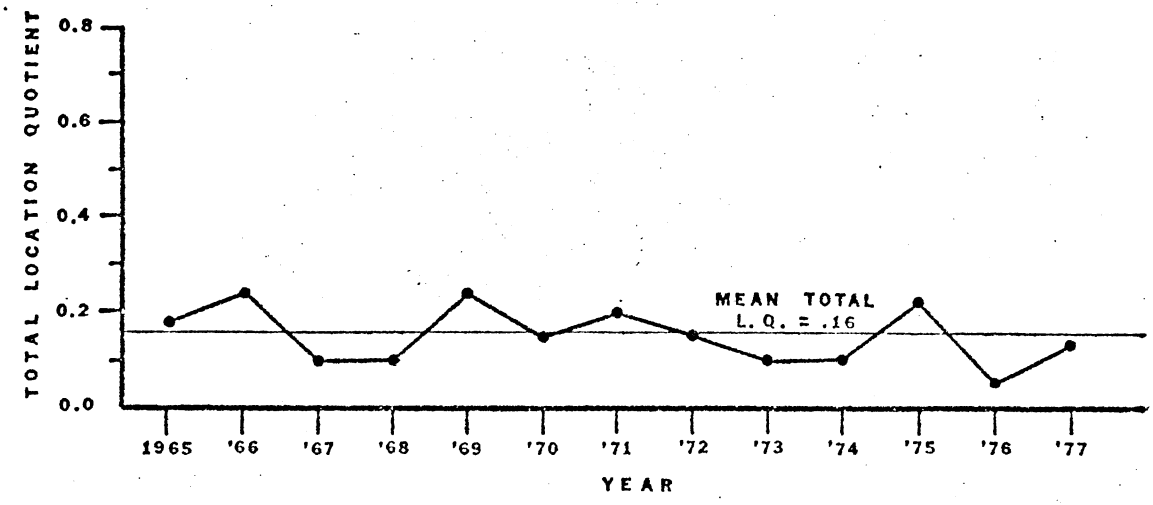

Figure 6. The Stable Production Trend of Canada

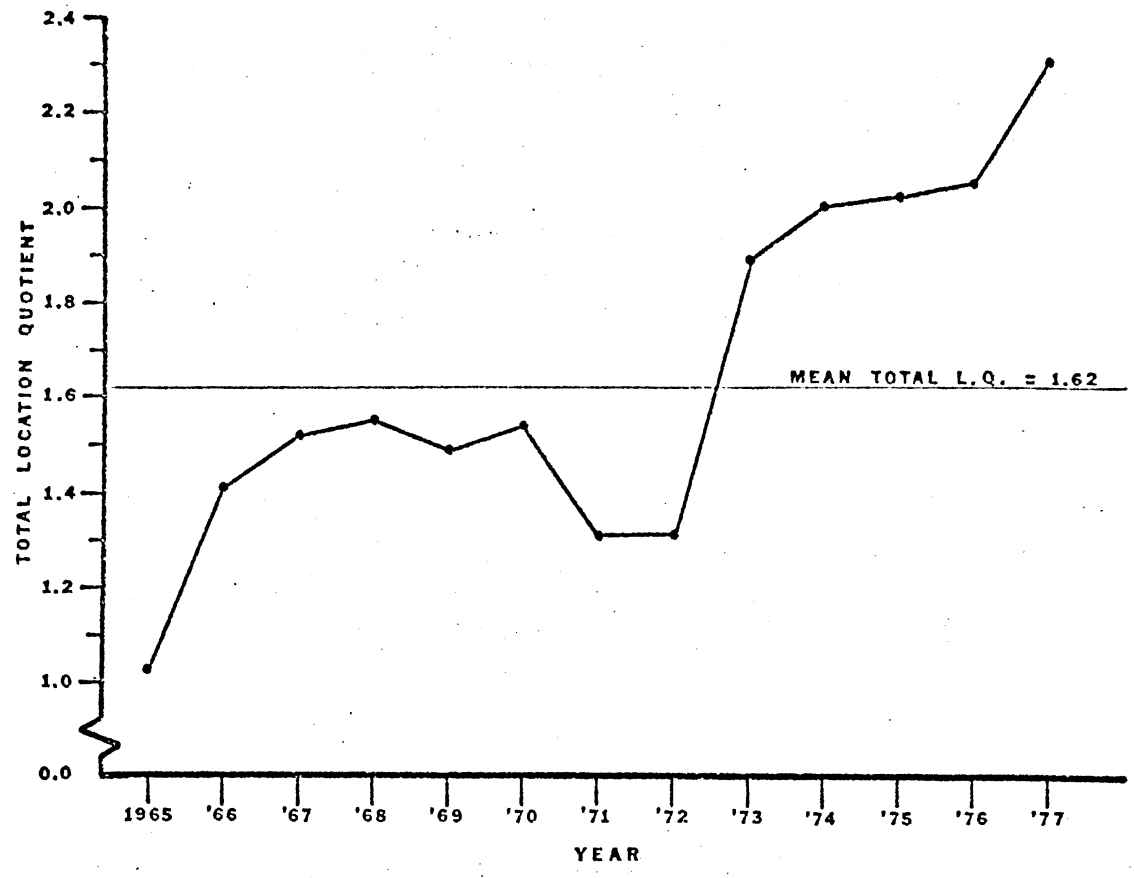

Figure 7. The Increasing Production Trend of Florida

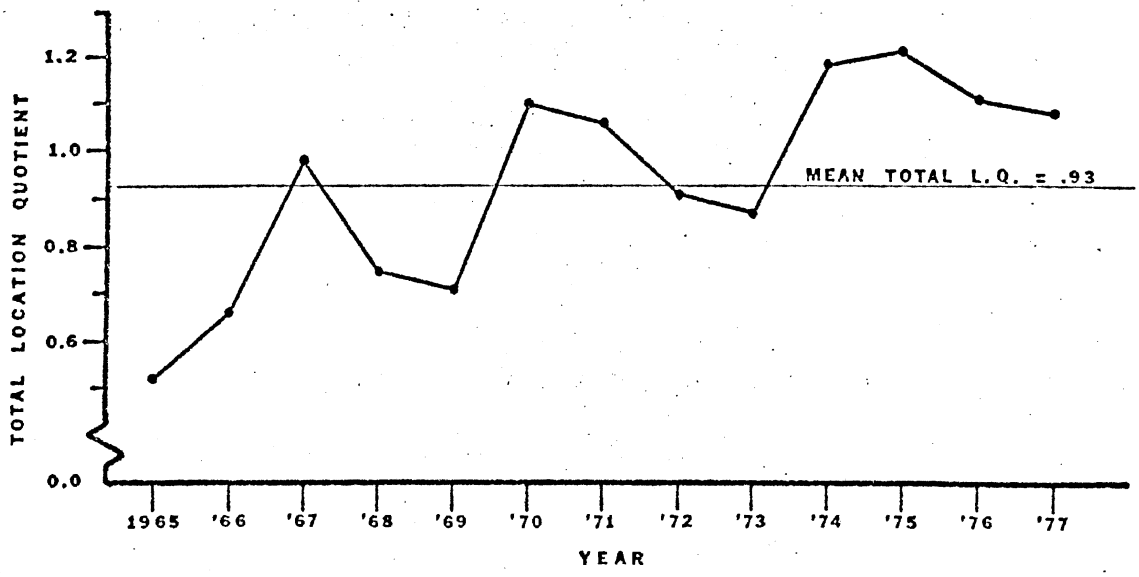

Figure 8. The Increasing Production Trend of Latin America

potential of Latin players and accepted more Latins into its system during this period (Figure 8). The leveling off of Latin American production in the last few years of the sample was quite likely due to a newly imposed federal regulation directed principally toward Professional Baseball's clubs. The regulation was in response to the increasing number of foreign athletes who chose not to return to their home countries when their playing seasons were completed in the United States. In essence, the rule restricts each major league club from increasing its signing involvement in the Caribbean by assigning an immigration quota to each club, based upon that club's previous degree of employment of foreign athletes.[8]

There were 13 states that showed signs of decreasing production. Their locations are varied with the South and North near equally represented. Growing community disinterest in baseball is one possible reason for the decreasing productivity but there are no doubt other factors also influencing this decline. In the next chapter the degree of an area's success in advancing its players into the major leagues is analyzed. Interestingly, some of the states showing a sharp decline in production were also poor providers of major league talent. It is possible that the scouting industry recognized this trend and has subsequently begun to sign fewer players from these states. Iowa presents an excellent example of a state experiencing a steady production decrease (Figure 9). This state produced more players in the first two years of the sample than during the last six years combined.

The seven areas categorized as random producers could generally be described as lesser-populated, lower total producing states. It was not possible to classify any of these states in the other three

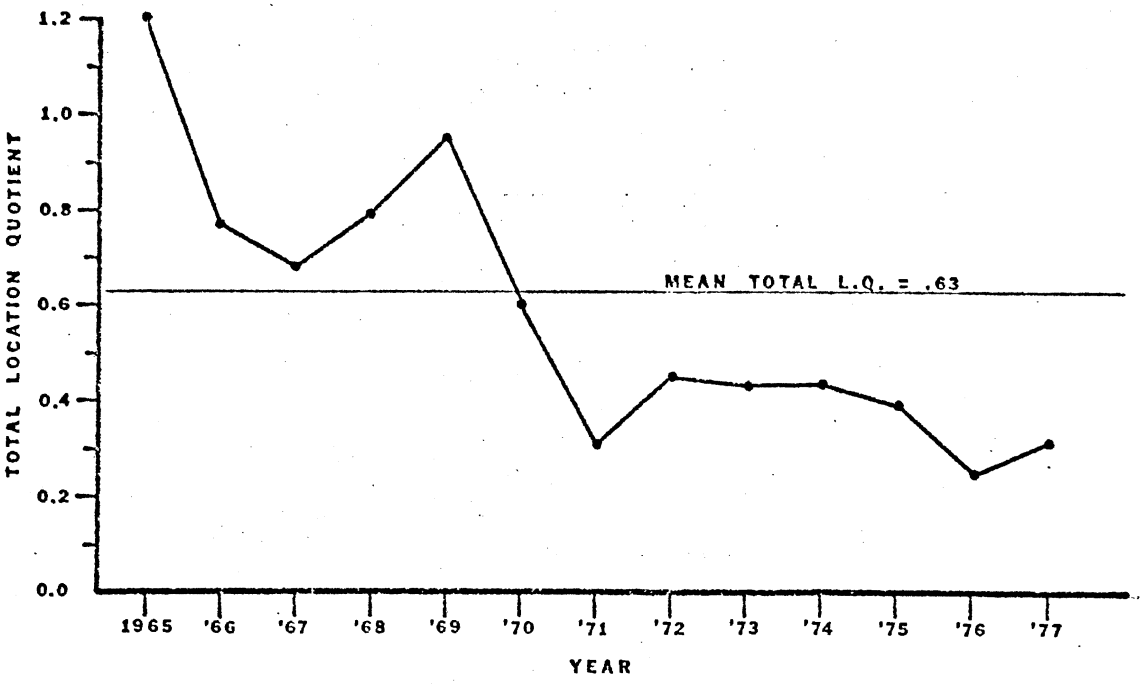

Figure 9. The Decreasing Production Trend of Iowa

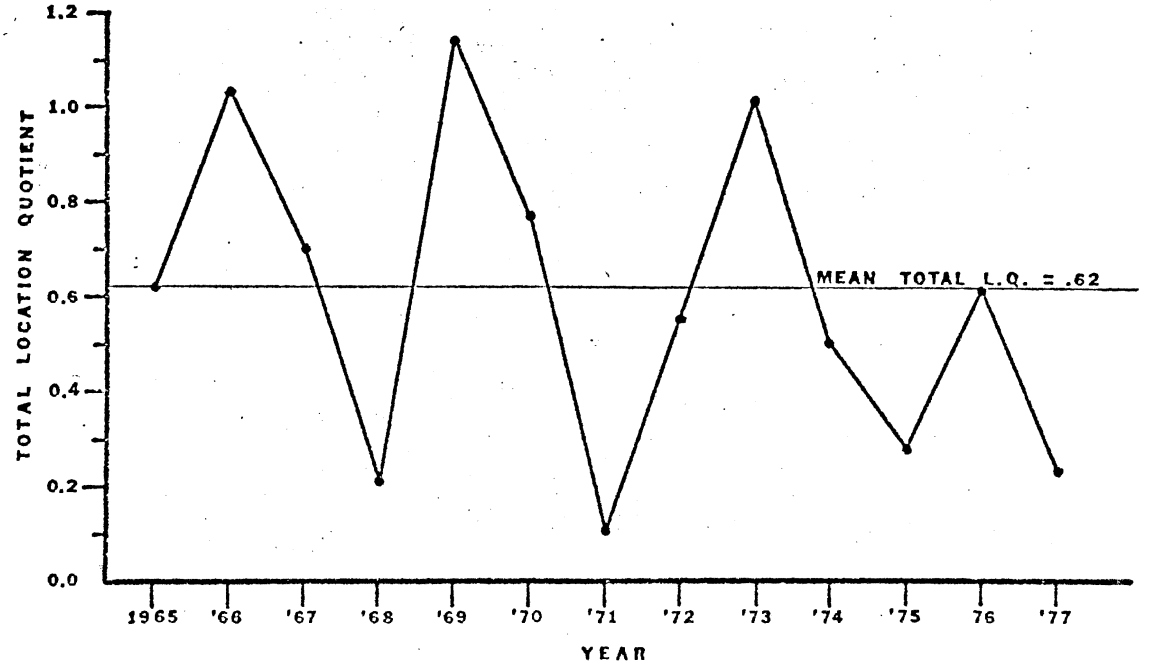

Figure 10. The Random Production Trend of Arkansas

categories because of their widely varying rates of production during the sample. An extreme example would be Delaware's. It sent forth nine of its 37 first-year players in one year (1977) while failing to produce a single player during four years. Arkansas provides a more reasonable representation of a varied production pattern (Figure 10).

FOOTNOTES

[1]Frank Deford, "Liege Lord of Latin Hopes," Sports Illustrated (December 24, 1973), p. 65.

[2]Ron Fimrite, "In Cuba, It's Viva El Grand Old Game," Sports Illustrated (June 6, 1977), pp. 76-77.

[3]Robert H. Boyle, "The Latins Storm Las Grandes Ligas," Sports Illustrated (August 9, 1965), p. 30.

[4]"Active Players," Official 1978 Baseball Register (St. Louis, 1978), pp. 3-434.

[5]John F. Rooney, Jr., A Geography of American Sport (Reading, Massachusetts, 1974), pp. 185-186.

[6]Ed Katalinas, Director of Scouting, Detroit Tigers Baseball Club, personal correspondence, April 6, 1979.

[7]Rooney, pp. 283-284.

[8]Paul Snyder, Director of Scouting, Atlanta Braves Baseball Club, personal correspondence, February 19, 1980.

CHAPTER VI

THE PRODUCTION OF MAJOR LEAGUERS

Introduction

An athlete who signs a contract with Organized Baseball in hopes of becoming a major leaguer faces tremendously discouraging odds. A vast majority of the players will never participate in even one major league game. Rather, they will spend their brief baseball playing careers in the lower paying, less glamorous minor leagues. There are no specific minor league time limits that a player must adhere to before either reaching the majors or retiring from Baseball's ranks, but there is some indication that a player who has not risen to a major league roster after a five or six year stint in the minors might be wise to consider another profession. And, because a contemporary major league club normally controls only four or five minor league team rosters, a player must show steady improvement during his first few minor league seasons or the club will unconditionally release him from Baseball in order to make room for a younger, more potentially talented player.

Of the 13,985 first-year professionals included in this study only 1,257 (approximately nine percent) were found to have played in a major league game by October of 1978. The percentage of major leaguers will rise slightly when the players signed during the sample's

final years are given the full opportunity to advance through the minor league system. In the first 10 years of the study an average of 10.23 percent of the first-year players later performed in the majors. Included in the major league total are some players who played sparingly in the majors and were soon returned to the minors, before being released. Consequently, if one wished to consider only those players who played steadily at the major league level, an estimate of seven percent (1 of every 14 professionals) might more accurately predict the chances of a player remaining in the majors for an extended period.

Contrary to the comprehensive analysis given to the entire first-year player sample, the sample of only those players reaching the major leagues is reviewed in less detail. Because the major league sample is considerably smaller, over 50 percent of the states and foreign producing nations produced less than one major league player per year. As a result of sample size it is more difficult to accurately examine the lesser populated and poorer producing areas. Therefore, a county level examination is not included in this chapter's analysis.

The analysis of the major league sample is based upon the "major location quotient" or "major L.Q." - a per capita statistic computed similarly to the total location quotient. Only those first-year players who reached the major league level by October, 1978, are involved in the major location quotient, whereas every sampled first-year player was included for the total location quotient's computation. The major location quotient is based upon a United States production of 1,162 athletes who advanced into the major leagues. This computes to a national production rate of 5.69 major league players per one million people.

Analysis at the State Level

A list of the top 10 states ranked by virtue of their major location quotient indices provides additional proof regarding the role of a warm climate in the production of quality ballplayers (Table IX).

TABLE IX

LEADING STATES BASED ON PRODUCTION RATE OF MAJOR LEAGUE PLAYERS, 1965-1978*

Rank	State	Major L.Q.	Number of Players
1.	California	3.33	379
2.	Puerto Rico	2.28	36
3.	Arizona	2.18	22
4.	Florida	1.55	60
5.	Oklahoma	1.51	22
6.	Dominican Republic	1.32	32
7.	Washington	1.24	24
8.	Alabama	1.07	21
9.	Michigan	.99	50
10.	Texas	.97	62

*States needed to have produced an average of one major league player per year to be considered.

Of these 10, only Michigan normally experiences severely frigid winters. The total number of Californians in the major leagues is phenomenal as over 30 percent of all the major league players originated from that state. Oklahoma's highly ranked position is noteworthy considering the fact that its total per capita production index of first-year players was just slightly above the national norm. The rapid decline of the major location quotient indices to less than 1.00 is also significant. California's exceptionally dominant production has forced the production figures of most other states to become comparatively small.

A choropleth map based on the major location quotient indices at the state level displays the continental pattern of major league player production (Figure 11). This map further indicates that a majority of the states are poor producers of major league talent. Three states - Alaska, Vermont, and Wyoming - produced no major league players duirng the sampled years. The wide deviation in the range of foreign nation indices is created somewhat by the sample's size and the inherent population differences between the various foreign countries.

Analysis of Metropolitan Areas

An analysis of the metropolitan areas that produced the most major leaguers further supports the positive relationship between a continual warm climate and the high production of ballplayers (Table X). All of the SMSAs which produced at the rate of at least twice the national norm are located in areas far removed from cold winter weather. California's dominance in productivity is well substantiated by the fact that it can claim seven of the top nine ranked metropolitan areas.

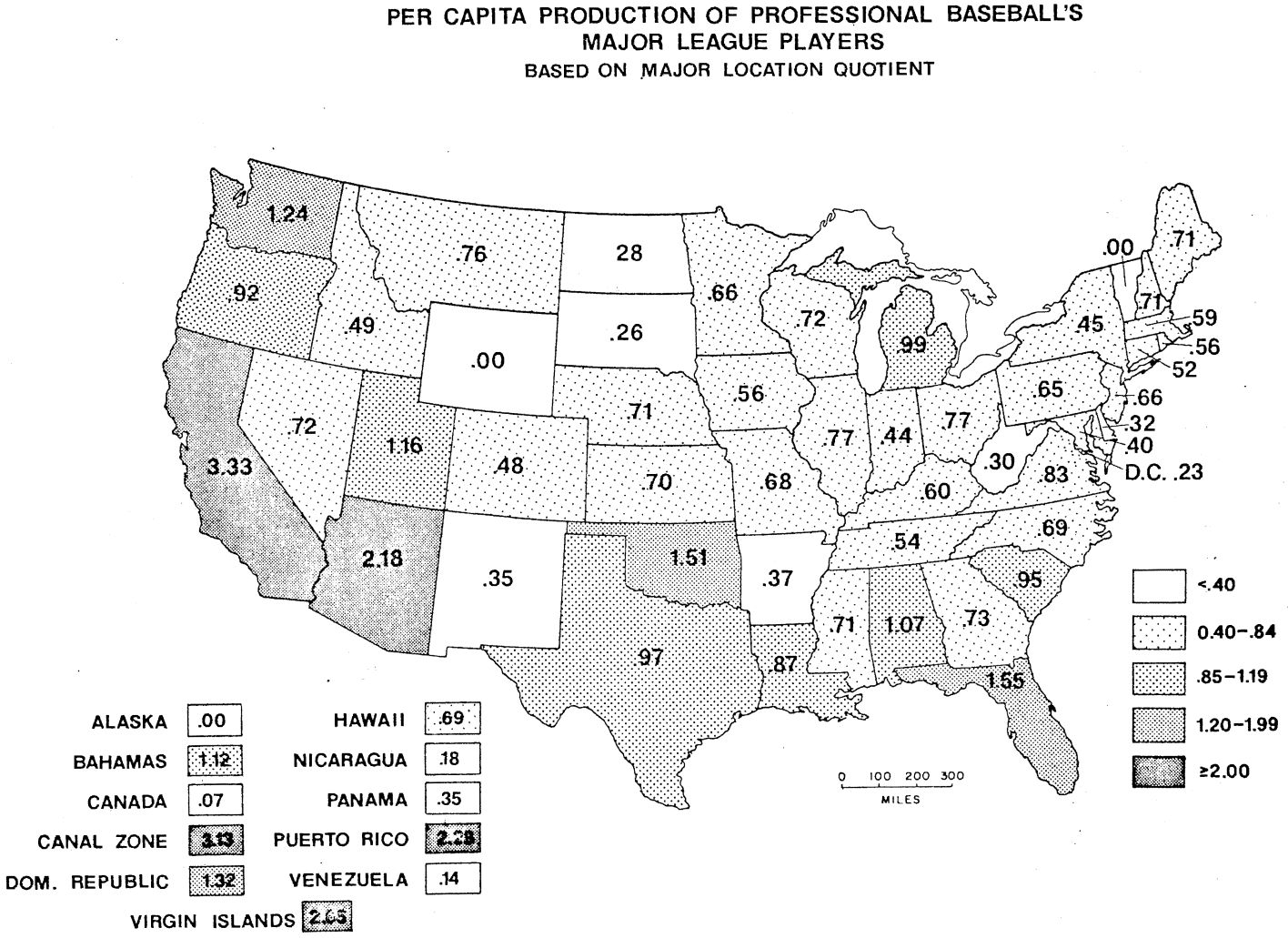

Figure 11. Per Capita Production of Professional Baseball's Major League Players

TABLE X

PRIMARY MAJOR LEAGUE PLAYER PRODUCING METROPOLITAN AREAS*

Rank (Based on Total L.Q.)	SMSA, State	Major Location Quotient	Number of Players	Rank (Based on Number of Players)
1.	Sacramento, Calif.	5.48	25	8
2.	Los Angeles, Calif.	4.04	162	1
3.	Anaheim, Calif.	3.36	26	5
4.	San Diego, Calif.	3.36	26	7
5.	Birmingham, Ala.	2.85	12	7
6.	Phoenix, Ariz.	2.72	15	11
7.	San Jose, Calif.	2.64	16	9
8.	San Francisco, Calif.	2.53	45	2
9.	San Bernardino, Calif.	2.30	15	12
10.	Miami, Fla.	2.22	16	10
11.	Tampa, Fla.	2.07	12	18
12.	Seattle, Wash.	1.60	13	14
13.	Cincinnati, Ohio	1.39	11	20
14.	Atlanta, Ga.	1.39	11	21
15.	Detroit, Mich.	1.34	32	4
16.	Houston, Texas	1.14	13	15
17.	Pittsburgh, Pa.	.95	13	16
18.	Newark, N.J.	.93	10	22
19.	St. Louis, Mo.	.88	12	19
20.	Chicago, Ill.	.70	28	6
21.	Philadelphia, Pa.	.51	14	13
22.	New York, N.Y.	.49	33	3

*Includes all SMSAs producing a minimum of 10 major league players during the study period. See Appendix B for full SMSA titles.

Also, Los Angeles far surpassed any other SMSA in the number of players produced.

A list of lesser-populated but significant metropolitan producers of major league talent includes a few northern SMSAs (Table XI).

TABLE XI

LEADING LESS-POPULATED METROPOLITAN AREAS BASED ON PRODUCTION RATE OF MAJOR LEAGUE PLAYERS*

Rank	SMSA, State	Major Location Quotient	Number of Players
1.	Pensacola, Fla.	5.04	7
2.	Decatur, Ill.	4.21	3
3.	Billings, Mont.	4.02	2
4.	Fresno, Calif.	3.82	9
5.	Tyler, Texas	3.62	2
6.	Vallejo, Calif.	3.52	5
7.	Springfield, Mo.	3.44	3
8.	Santa Rosa, Calif.	3.43	4
9.	Santa Barbara, Calif.	3.32	5
10.	Springfield, Ill.	3.26	3
11.	Racine, Wis.	3.08	3
12.	Abilene, Texas	3.08	3
13.	Lima, Ohio	3.06	2
14.	Tucson, Ariz.	3.00	6

*Includes all SMSAs of less than one-half million population producing major league players at a rate three times greater than the national norm. See Appendix B for full SMSA titles.

Despite a greater number of southern SMSAs ranked in Table XI, the production performances of Decatur, Billings, Racine, Lima, and Springfield, Illinois should encourage aspiring northern amateur ballplayers. The small sample size makes it difficult to estimate the degree to which the previously described community variable has stimulated quality production from these areas but it is reasonable to assume that its effect has been significant.

The final table concerning the metropolitan production of major leaguers strongly supports the negative effects of the climate variable (Table XII). This list of the heavily populated, very poor producers of quality talent is made up entirely of SMSAs located in the United States' northeastern quadrant. Evidently these 11 urban areas are not only hindered by cold winter weather but by poorly supportive baseball communities as well.

Areal Success Analysis

The remaining portions of this chapter are devoted to analyzing the relative successful productivity of areas. The spatial variations in the production of first-year players (Chapter V) and of the subsequent major league players have been determined (preceding portions of Chapter VI). It is now appropriate to compare the results from these two previous analyses in order to ascertain the actual efficiency or "success" of an area's production. In this case "success" relates to an area's ability to advance its first-year players into the major leagues.

A third location quotient - "the success location quotient" or "success L.Q." - is used throughout the remainder of this chapter.

TABLE XII

HEAVILY POPULATED, LOW MAJOR LEAGUE PLAYER PRODUCING METROPOLITAN AREAS*

SMSA, State	Major Location Quotient	Number of Players
Washington, D.C.	.35	6
Boston, Mass.	.32	5
Indianapolis, Ind.	.32	2
Youngstown, Ohio	.32	2
Hartford, Conn.	.32	1
Milwaukee, Wis.	.25	2
Paterson, N.J.	.25	2
Albany, N.Y.	.23	1
Springfield, Mass.	-	0
Louisville, Ky.	-	0
Rochester, N.Y.	-	0

*Includes all SMSAs with a population exceeding one-half million and producing at a rate of less than .4 of the national norm. See Appendix B for full SMSA titles.

The success location quotient index is computed by dividing an area's major location quotient index by its total location quotient index. As in the cases of the two previous location quotient computations, an area's success index is based upon a national norm index of 1.00. The example below computing Oklahoma's success index illustrates the simplicity of this measurement.

$$\frac{\text{Oklahoma's Major L.Q. Index: } 1.51}{\text{Oklahoma's Total L.Q. Index: } 1.06}$$

$$= 1.42 \text{ Success L.Q. Index} \qquad (6.1)$$

The relatively high success index of 1.42 means that, from a near normal production of first-year players, Oklahoma sent forth its players into major league competition at a much greater rate than might have been expected. This suggests that Oklahoma's amateur player pool is far more talented than the first-year player sample reflects. Conversely, Connecticut's total L.Q. of .98 extremely overestimates its ability to produce the highest quality ballplayers as this New England state's success L.Q. was a mediocre .53.

Success Analysis at the State Level

Unlike the previous maps depicting the data at the state level, broad regional tendencies involving the success index are not as apparent (Figure 12). The most successful states are represented by a southwestern contingent of Utah, Oklahoma, Arizona, and California. Michigan and Hawaii are the only other states that fall into the highest success category. The northeastern states appear to be the least successful. Delaware, Maryland, and West Virginia form a contiguous group of the very poorest domestic success states and New Jersey, New York, Connecticut, and Massachusetts all produced at rates well below the national norm. Generally speaking, the remaining state success indices are distributed in a spatially random pattern that reveals no manifest north-south dichtomy. Except for Puerto Rico's moderately high success index, the foreign countries form a bloc of moderately low to poor advancers of talent. (Because of the smaller range of success location quotient indices and more concentration about the norm inherent with this index's computation, the index categories of

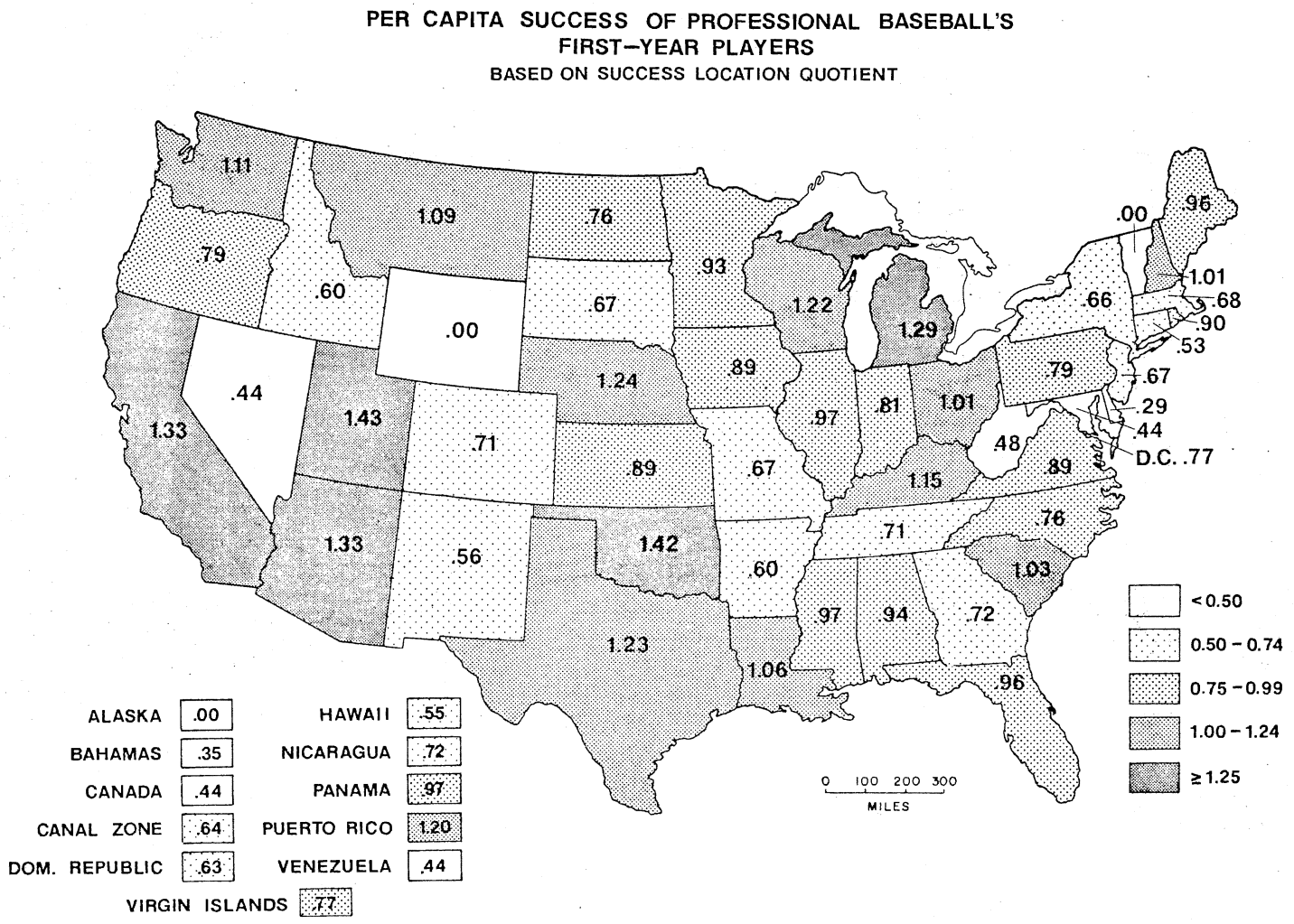

Figure 12. Per Capita "Success" of Professional Baseball's First-Year Players

Figure 12 have been altered from the previous choropleth maps in order to better fit the data's frequency.)

Another way to illustrate an area's relative rate of production success is via the use of a diagram which graphically portrays the indices of total first-year player production, major league player production, and subsequent success indices (Figure 13). The graph's x-axis represents the total location quotient and the y-axis measures the major location quotient. A state is positioned on the graph at the point where its two indices meet when they are drawn perpendicular to their respective axes. The state's success location quotient index is then determined by this point's relative distance from the nearest dashed, diagonal line radiating from the graph's bottom left corner. Those states plotted above the principal diagonal (heaviest dashed line intersecting the x and y intersection) have success indices greater than the national norm and those below, less than the national norm. The advantage that this figure has over a map based solely upon the success location quotient is that all three of an area's location quotient indices are readily available for comparison with any other area's respective indices.

Of the 60 states and foreign nations plotted in Figure 13, only one - Utah - is found in Quadrant I. Utah produced first-year players below the national rate while reversing that trend to produce a higher than average rate of major leaguers. In fact, Utah was the most successful of all areas in advancing its first-year players into the major leagues. Quadrant II, the graph's section signifying both better than average first-year and major league player production, contains 11 areas. Each of these 11 experience relatively warm weather throughout

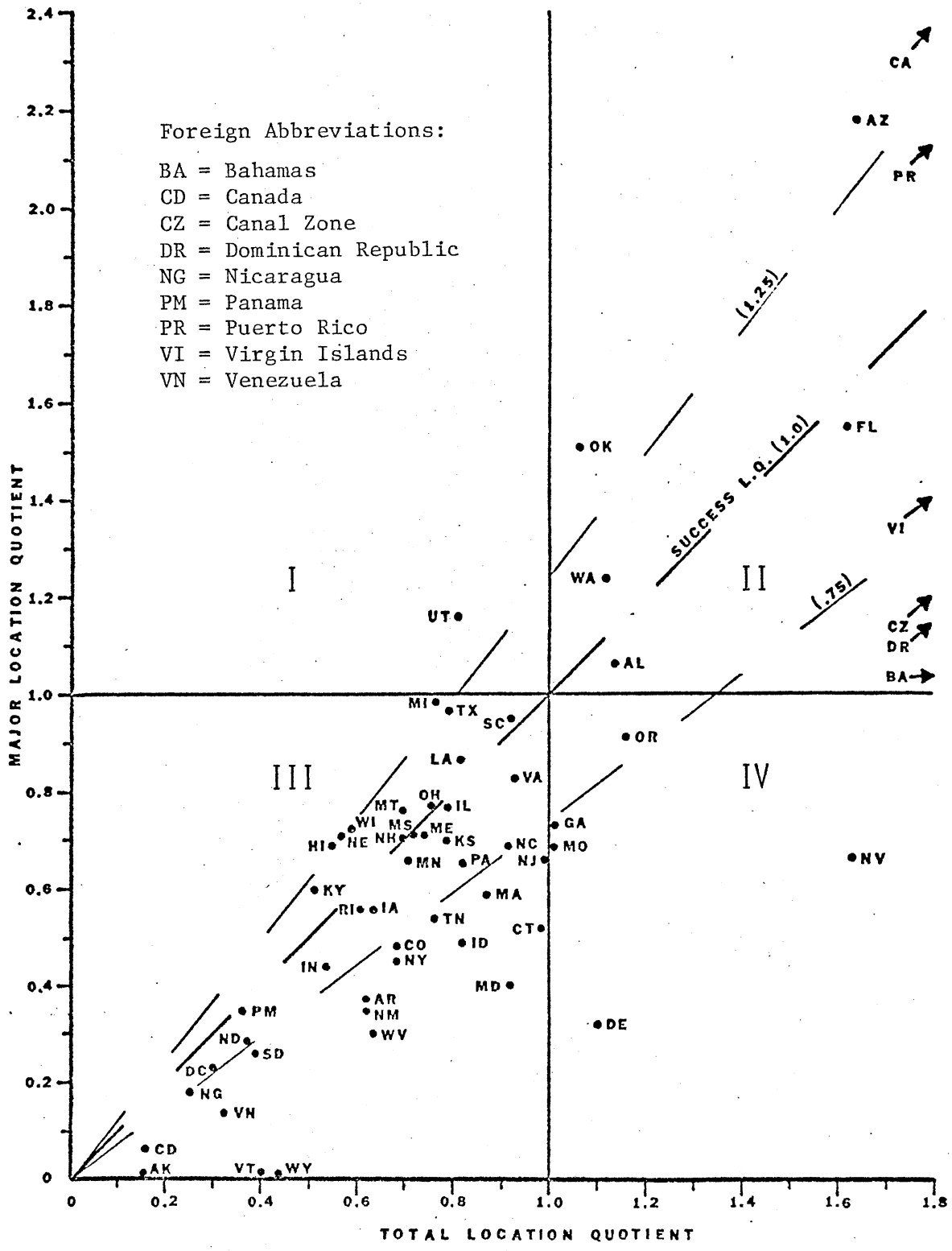

Figure 13. Three-Way Comparison of State Production Indices

the year. Five of these 11 have success indices above 1.0. And, of those six in Quadrant II having success indices less than the norm, the four least successful areas are Latin American. The most crowded section of the graph is Quadrant III, where 43 areas are plotted. The areas located in Quadrant III had poorer than average production rates of both first-year and major league players. Thirty-two of these 43 areas have success indices less than the national norm. Quadrant IV is comprised of five geographically dissimilar states which produced first-year players at rates greater than the national rate but major leaguers at rates below the norm. As a result the states plotted in Quadrant IV have relatively low success rates.

A general summarization of Figure 13 is that of those states and foreign areas which produced first-year players at rates above the norm (16 of 60), only a select few (5) were able to advance their players into the major leagues at greater than average rates. It is hypothesized that the inhabitants of these five areas - Oklahoma, California, Arizona, Puerto Rico, and Washington - widely support the existence of a great many excellent amateur baseball programs. The same can be said for Utah, in accordance with its distinctive success index. On the other hand, just as these six appear to be the choicest providers for Baseball's system, there are a great many other states and involved foreign nations that display qualities of inferior production. The graph shows that a large majority of areas (44 of 60 produced first-year players at rates below the national norm and that nearly three-quarters of these (32 of 44) subsequently advanced less than an average share of players into the majors.

Success Analysis of Metropolitan Areas

A survey of metropolitan areas based upon their respective success indices provides for a more localized examination. A list of the most successful producing SMSAs is comprised of 20 spatially dispersed urban areas (Table XIII). Five of these are Californian and eight more are located in the southern one-half of the country, a fact which implies an association with the climate variable. The climatic conditions do not totally dictate an area's success performance however, as evidenced by a group of four highly successful SMSAs located near the Great Lakes (Columbus, Gary, Detroit, and Cleveland) and another in Nebraska (Omaha).

A list of the most inferior producing SMSAs shows that 16 of the 18 least successful urban areas are located east of the Mississippi River (Table XIV). Eleven of these are concentrated in the Northeast. The remaining seven are southern SMSAs with three of these located in Florida. But for the presence of Ft. Worth and Las Vegas in Table XIV, the western two-thirds of the United States is void of relatively unsuccessful metropolitan areas.

Toward an Explanation of Areal Success

The various state and metropolitan area success rates cannot be explained as simply as the total first-year player rates of production were accounted for in Chapter V. The climate and community support variables succinctly provided the necessary answers concerning the analysis of the first-year player origins. A close examination of the success indices suggests however, that a third variable was, in some instances, associated with an area's degree of success. This third

TABLE XIII

MOST "SUCCESSFUL" SMSAs*

Rank	SMSA, State	Success L.Q.	Major League Players/First-Year Players
1.	Pensacola, Fla.	2.22	7/34
2.	Columbus, Ohio	2.09	7/36
3.	San Antonio, Texas	1.75	7/43
4.	Sacramento, Calif.	1.70	25/159
5.	Tucson, Ariz.	1.67	6/39
6.	Omaha, Neb.	1.59	5/34
7.	San Francisco-Oakland, Calif.	1.56	45/352
8.	Birmingham, Ala.	1.54	12/84
9.	Gary, Ind.	1.54	4/28
10.	Los Angeles, Calif.	1.52	162/1152
11.	Oklahoma City, Okla.	1.50	6/43
12.	Salt Lake City, Utah	1.47	4/29
13.	Nashville, Tenn.	1.47	4/29
14.	Seattle, Wash.	1.42	13/100
15.	Detroit, Mich.	1.37	32/252
16.	Phoenix, Ariz.	1.35	15/120
17.	Santa Barbara, Calif.	1.32	5/41
18.	Tulsa, Okla.	1.29	6/50
19.	Cleveland, Ohio	1.27	9/76
20.	San Diego, Calif.	1.25	26/226

*The term "successful" refers to an area's ability to advance its first-year players into the major leagues. This list includes all SMSAs with a success location quotient index greater than 1.24. See Appendix B for full SMSA titles.

TABLE XIV

LEAST "SUCCESSFUL" SMSAs*

SMSA, State	Success Location Quotient	Major League Players/First-Year Players
Jacksonville, Fla.	.50	2/42
Baltimore, Md.	.49	5/107
Ft. Worth, Texas	.48	2/45
Ft. Lauderdale, Fla.	.46	2/47
Youngstown, Ohio	.42	1/25
Hartford, Conn.	.38	1/28
Las Vegas, Nev.	.38	1/28
Boston, Mass.	.36	5/153
Trenton, N.J.	.35	1/31
Harrisburg, Pa.	.32	1/33
Bridgeport, Conn.	.32	1/33
Greensboro, N.C.	.30	1/34
Albany, N.Y.	.29	1/36
Paterson, N.J.	.27	2/77
West Palm Beach, Fla.	.22	1/48
Springfield, Mass.	-	0/25
Chattanooga, Tenn.	-	0/28
Rochester, N.Y.	-	0/32

*The term "successful" refers to an area's ability to advance its first-year players into the major leagues. This list includes all SMSAs with a success location quotient index less than .51. See Appendix B for full SMSA titles.

variable, involving the complex nature of Professional Baseball's scouting industry, is appropriately entitled the "scouting variable." The recognition of a third explanatory variable does not down play the role of the climate and community variables. On the contrary, the type of climate and the degree of community involvement remain critical in the production of quality baseballers. However, in the end it is the scouting industry that decides, either rightly or wrongly, who and how many players are selected from an area each year. Thus, the inclusion of the scouting variable becomes absolutely necessary in explaining an area's degree of productive success.

The scouting variable has two interrelated characteristics that appear to be factors which affect an area's index of success. First, the somewhat fixed spatial distribution of the scouts inherently influences the first-year player signing results, consequently affecting an area's subsequent degree of success. Secondly, a more intangible aspect of the variable relates to the scouting industry's local and/or regional (in)accuracy in selecting the finest available amateur players. In essence, the scouting variable questions whether the scouting industry works as efficiently and signs its players in the most discriminating manner as possible.

It has been assumed throughout this research that the major league clubs have a reasonably good idea, based upon historical experience, where the most and best amateur players are being produced. Accordingly, it is assumed that Baseball's scouts have been positioned in an efficient manner conforming to the distribution of amateur players. An overall assessment would conlcude that these assumptions are valid. It appears however, in a scattering of locales, that the baseball

establishment has not positioned its scouts nor judged the amateur talent as efficiently as possible.

Missouri and Arkansas provide excellent examples where the scouting industry seemingly overestimated a state's amateur talent base. Missouri has traditionally supplied a great share of baseball players into the professional ranks, a legacy no doubt sparked and sustained by Professional Baseball's historical presence in St. Louis. Arkansas has produced fewer players but it too has gained recognition for its supply of "country" ballplayers. Nevertheless, this research indicates that the contemporary ballplayers of Missouri and Arkansas are neither as plentiful nor as talented as Baseball's scouts perceive them to be.

The scouting industry's perception problem in Missouri and Arkansas may stem from the fact that both states are over-populated with scouts, creating a situation where the states may have become "over-scouted." A simple way to judge the relative degree of investigative scouting that a state experiences is from the ratio of a state's total number of signed first-year players per number of resident scouts. Through the use of a directory of employed major league scouts for the years of 1965, 1970, and 1975, it was found that a national average of 22.2 first-year players were signed per scout during the 13 sampled years. This means that a state having a ratio considerably less than the 22.2 player/scout norm was too heavily saturated with scouts relative to its amateur talent base. In the case of Missouri a misapportionment of scouts is obvious. It's player/scout ratio was 11.2, indicating that it housed twice as many scouts as the national norm deems necessary. Only one other state that produced over 50 first-year players during the sample, neighboring

Arkansas, had a lower proportion of signed players to resident scouts (10.4). (This areal player/scout ratio is not a totally accurate comparative measure. The general population distribution of an area affects the efficiency of a scout and scouts commonly travel out of their resident states in search of prospective players. However, the fact remains that most scouts work out of their home residences and are normally confined to certain limited scouting regions, giving some credence to the measurement.)

It is believed that the poor success indices of Missouri and Arkansas are not a matter of coincidence. Rather, it is hypothesized that both states, because of their relatively high number of scouts, are receiving too much undeserved attention from the scouting industry. Consequently, this leads to a far greater number of Missouri and Arkansas players being signed to professional contracts than actually deserve the honor. This reasoning is supported by their state success indices. Missouri's total L.Q. index of 1.01 indicates that its involvement with amateur baseball is comparable with the nation as a whole. Yet, its players have had such poor success in reaching the major leagues that the quality of Missouri's amateur programs and the judgement of the Missouri-based scouts must now be severely questioned. The same can be said for Arkansas. This state's total L.Q. index was less respectable than Missouri's and its success performance was even poorer.

Similarly, the phenomenon of "under-scouting" aids in explaining the high success rates of a few states. Of the six states with the highest success indices only Oklahoma (interestingly adjacent to the over-scouted region of Missouri and Arkansas) had more scouts than its

talent base warranted. Utah, the most successful state, averaged only one resident scout for a player/scout ratio of 53.0. It is possible that with so few scouts only Utah's best amateur players were given much notice by the scouting industry. It stands to reason that if Utah's marginal prospects were never given the full opportunity to regularly perform before a scout's watchful eyes that very few of them would have been drafted.

The northeastern United States' regional success performance was basically mediocre. Not surprisingly, the area also was over-represented with scouts, but not as disproportionately as either Missouri or Arkansas. With a great number of scouts residing in the Northeast and five major league clubs located between Boston and Baltimore there is a natural tendency to overestimate the talent from this area. This is borne out more locally by the low success indices of many northeastern SMSAs.

The poor success of three SMSAs in Florida was not anticipated. It might be explained by the cities' immediate access to Professional Baseball's present-day training grounds. While Florida had a near normal player/scout ratio (21.2), it must be remembered that a majority of the professional clubs base their annual spring conditioning camps, winter instructional sessions, and season-long rookie leagues in this state. With so much attention paid to the state by Professional Baseball, its clubs could be inclined to sign marginal Florida prospects simply because of geographic convenience. An equally marginal amateur prospect who played baseball in an area not frequented as often by scouts would more likely go unnoticed.

The high success rates of Columbus, Gary, Detroit, and Cleveland

are puzzling. The respective home states in question have near normal player/scout ratios and five major league franchises (counting the two in Chicago) to ensure local scouting coverage. Nevertheless, the scouts conspicuously underestimated the talent being produced in these four midwestern SMSAs. The demographics of the four urban areas suggest that there may be a racial explanation. It is known that there is a declining number of black baseball players entering Professional Baseball.[1] However, the black athlete's growing supremacy in other American sports might also exist in Baseball, perhaps in a more subtle manner. Rather than dominating the rosters as black athletes do in so many domestic team sports, blacks may display their baseball playing superiority by advancing into the major leagues at a greater rate than whites. This is pure speculation and, because of the absence of racial information in this study's data, no racially related explanation is currently verifiable, but it is a theory deserving of further research.

The Lack of Foreign Success

Of the sample's 1,441 first-year foreign players, 94 gained major league status for a successful percentage of 6.52. (Nine were Canadian ballplayers and the remaining 85 were Latin American.) This foreign success percentage is significantly lower than the domestic success ratio of 9.26. The disparity of these figures suggests that it is not appropriate to compare the general advancement success of foreign players with that of domestic players. Consider the production figures of Latin America. This area produced a significant amount of first-year players but a comparatively small proportion of major leaguers. The area's relatively low success indices could be hastily regarded as a

warning to the major league clubs not to spend their time or money on Latin prospects. A closer inspection and a better understanding of the details involved with foreign professional signings show that such a warning is, in some respects, misleading. In fact, despite the foreigner's higher than average risk of failure, there are some clubs which evidently believe that the scouting and signing of Latins is a highly profitable investment. (See Individual Club Strategies - Chapter VII.)

There are many factors which cause the overall Latin success performances to be less impressive than most domestic areas. One reason for the low foreign indices, and truthfully for their present underestimation, is caused by an inherent characteristic of the sampled data. The signing of Latin players, especially those from the major Latin producer - the Dominican Republic - became increasingly more common during the latter stages of the sampling period. Hence, the foreign success indices should improve slightly when all of these more recently signed athletes are given the full opportunity to progress through the minor league system. Disregarding this methodological bias, a Latin prospect truly faces a more formidable task of proving himself worthy of major league roster status than do domestic players. Not only must the Latin player convince American management that he is as good or better than his American counterpart, but the Latin player must attempt to do so while adjusting to a culture much different from his own. Homesickness is a problem that many young Caribbean prospects never overcome and, there is also the problem of a different language. In this context the general rule of thumb is that those Latin ball-players who fail to learn English will fall short of reaching the major

leagues.[2] Defined in baseball terminology this means that a Latin's ability to speak and understand the English language may be as important as his being able to hit the hard-breaking slider or to throw a curve consistently for strikes.

The American stereotype of the Latin ballplayer's personality has also inhibited his widespread acceptance and success within Organized Baseball. Latins have gained a reputation among Baseball's management of being generally moody, explosive, and uncoachable. While this temperament might accurately describe some Latins it probably can be applied to an equal proportion of American ballplayers as well. Still, this oversimplified caricature of the Latin ballplayer is of no benefit to any individual Latino during his quest for recognition by the signing scouts and his later advancement through the minor league system.

The management of clubs that have signed a significant number of Latins confess that they do so with the expectation of very few ever reaching the majors. Yet, despite this anticipated failure, clubs justify their concentrated foreign scouting involvement in simple economics. Rather than offering bonuses of upwards to $100,000 for highly sought after American drafted players, the free market of the Caribbean provides a wealthy supply of prospects willing to sign free-agent contracts for bonuses as small as $1,000 and, in no case has a Latin player received more than $20,000 as a signing bonus. Thus, monetary constraints might compel many clubs to sign a high proportion of Latin athletes. While financial and ethnic discrimination is obvious, Baseball's management candidly defends its practices on the basis that the Latin player is acknowledged to be a far riskier investment than a domestic product.[3]

FOOTNOTES

[1]C. C. Johnson Spink, "Black Supply Turns From Torrent to Trickle," The Sporting News (February 19, 1977), p. 39.

[2]Frank Deford, "Liege Lord of Latin Hopes," Sports Illustrated (December 24, 1973), p. 65.

[3]Ibid.

CHAPTER VII

A BASEBALL FAN'S IMPRESSIONS OF THE DATA

Introduction

The two preceding chapters have examined the subject of quality baseball participation from a traditional economic-geographic viewpoint. The attempt to answer the questions of where, why, and to what degree quality baseball participation exists has been of the utmost importance, but those answers alone do not reveal how Professional Baseball's individual clubs have reacted to the spatial participatory pattern. It is also necessary to examine the data in a manner more harmonious with the average baseball fan's point of view. This final analysis chapter is included in anticipation of the question: "How does my favorite major league team fit into this scheme?"

An Overview of the Signing Statistics

There was a noticeable decline in the number of players that entered Baseball's ranks during the sampling period (Table XV). This is particularly borne out by the table's annual figures listed beneath the heading "first-year players signed per club." This statistic became necessary for proper comparison because six expansion franchises were added to the major leagues between 1965 and 1977. The most first-year players per club were signed in 1967 (59.2 players per club) and the least in 1975 (35.8 players per club).

TABLE XV

ANNUAL FIRST-YEAR PLAYER SIGNING STATISTICS

Year	Number of Clubs	Number of First-Year Players Signed: Drafted Signees	Free-Agents	Total Signed	Percent of Drafted Signees	First-Year Players Signed Per Club	Number of "Successes": Drafted Successes	Free-Agent Successes	Total Successes	Percent Total Successes
1965	20	*	*	1102	*	55.1	*	*	124	11.25
1966	20	503	628	1131	44.5	56.6	77	33	110	9.73
1967	20	674	509	1183	57.0	59.2	96	20	116	9.81
1968	22**	642	455	1097	58.5	49.9	101	14	115	10.48
1969	24	728	600	1328	54.8	55.3	95	33	128	9.64
1970	24	694	557	1251	55.5	52.1	102	32	134	10.71
1971	24	595	471	1066	55.8	44.4	91	24	115	10.79
1972	24	586	484	1070	54.8	44.6	79	27	106	9.91
1973	24	542	395	937	57.8	39.0	76	19	95	10.14
1974	24	521	434	955	54.6	39.8	75	20	95	9.95
1975	24	501	357	858	58.4	35.8	59	10	69	8.04
1976	24	587	375	962	61.0	40.1	34	5	39	4.05
1977	26	631	414	1045	60.4	40.2	10	1	11	1.05
Total	300	7204	5679	13985	55.9	46.6	895	238	1257	8.99

*Data not given.

**Four expansion clubs began signing first-year players during the middle of the 1968 signing period. Their totals were estimated to constitute two club's signings.

The table differentiates between those players who turned professional after being chosen in the amateur free-agent draft or signed as free-agents. Despite a general decline in the annual number of drafted players, a relatively constant proportion of first-year players continued to be selected by way of the draft process throughout the period. The remainder of those athletes who became first-year players did so by signing as amateur free-agents after they had been overlooked by or, in the case of foreign players, exempt from the amateur free-agent draft process. As there was an increase in the number of Latin American players during the study period, the signing of American free-agents became a less customary occurrence in the 1970's.

The decreasing number of "successes" (those advancing into the major leagues by October of 1978) in the final years was caused by the lack of time given those more recently signed players to move into the major leagues. Overall, the percentage of successes from each individual signing year was relatively stable. The year 1965 appears to have been the best signing period when 11.25 percent of that year's crop later competed in the major leagues. The group of players signed in 1969 may have been the least proficient as only 9.64 percent of those players had gained a successful status ten years later.

Annual Observations

In addition to the sample's first year being the single-most successful signing year, 1965 was also the initial year for Baseball's amateur free-agent draft. The first player chosen by way of the draft process was Rick Monday who was signed by the Kansas City Athletics. The A's also acquired Rollie Fingers, Sal Bando, and Gene Tenace from

the amateur ranks that year and were soon on their way to becoming the American League's dominant team by the early 1970's. Other particularly illustrious professional careers were initiated in 1965 by Ken Holtzman (Cubs, later dealt to the Athletics in a trade for Monday in 1971), Nolan Ryan and Amos Otis (Mets), John Bench (Reds), Larry Bowa (Phillies), and Graig Nettles (Twins).

The 1966 class of first-year players was one of the poorest yielding ones. One hundred ten players reached the major leagues from this year's class with an extraordinarily high proportion of the successes being former free-agents (30.0 percent). Although very few of the 1966 selections later gained "All-Star" status, three of this year's athletes were to become major contributors to Baseball's livelihood in the coming years. Andy Messersmith signed with California in 1966 and, while his pitching accomplishments during the next decade were significant, baseball historians will forever remember Messersmith as the player who successfully defied Baseball's reserve system. Messersmith's challenge of the reserve clause in 1975 helped to change a player-club contractual system that had been in effect within Organized Baseball since the late 1800's. The after-effects of Messersmith's defiance were increased contractual freedom for Baseball's veteran players and significantly higher player salaries. One athlete who took full advantage of these increased player benefits was Reggie Jackson, another prospect who turned professional in 1966. Jackson's turbulent career with Oakland, Baltimore, and the New York Yankees would become legendary due to his exploits both on and off of the playing diamond. And, Baseball gained a future Hall of Fame candidate in 1966 when the New York Mets were able to sign Tom Seaver to a professional contract only after an unusual turn of events.

Rather than sign with the Dodgers who had drafted him in 1965, Seaver chose to finish his college career at the University of Southern California before turning professional. Then in 1966, after Atlanta was found to have violated the rules by signing him before his collegiate season had officially ended, Seaver finally became a Met. Seaver soon developed into one of Baseball's premier pitchers and was the vital cog in the Mets' drive to the world championship in 1969.

The year 1967 saw the most first-year players selected per club. The year had its share of talented athletes, many of whom would be traded by their original signing club before their achievements would become nationally known. Four of this year's players, after being traded, were instrumental in leading their teams to the American League's Championship Series of 1979. Ken Singleton (Mets) and Rick Dempsey (Twins) found their way to Baltimore by the late 1970's while Don Baylor and Bobby Grich, who had both initially signed with the Orioles, became California Angel products in 1977. Also in 1967 Carlton Fisk signed with Boston, Ted Simmons with St. Louis, Jon Matlack with the Mets, Dave Concepcion with Cincinnati, Cesar Cedeno with Houston, and Vida Blue with the Athletics. Cleveland may have found the "sleeper" of this year's prospects when they signed Jim Kern as a free-agent after he had been ignored by the drafting process.

Four new major league clubs - Montreal, San Diego, Seattle (later Milwaukee), and the Kansas City Royals - began selecting players in the summer of 1968 and would begin to compete on the field in 1969. The 1968 signing year might best be entitled "The Dodger's Year." Dave Lopes, Steve Garvey, Ron Cey, Bill Buckner, Joe Ferguson, Bobby Valentine, and Doyle Alexander all signed into the Los Angeles system during

1968. In all, the Dodgers had 12 future successes come from its class of 55 first-year players. It was one of the most efficient single year yields by an individual club and was probably the most talented group of amateur athletes joining a ballclub's organization during one signing year of the sample. Talent was not totally confined to the Dodger camp however, as Gary Matthews and George Foster signed with San Francisco, Cecil Cooper and Bill Lee with Boston and Greg Luzinski with Philadelphia. The year 1968 was also the year when the late Thurman Munson turned professional with the New York Yankees.

With the four new expansion franchises signing a great many athletes throughout 1969 in order to build reputable minor league systems, this year saw the most first-year players (1,328) entering into Baseball's ranks. In general the National League clubs seemed to have had more success from this year's selections with the signing performances of Cincinnati and Pittsburgh especially noteworthy. The Reds signed Rawley Eastwick, Ken Griffey, Ross Grimsley, and Don Gullett in June of 1969 and added Joaquin Andujar from the Dominican Republic and Dan Driessen to their farm system later in the year. Pittsburgh countered by signing two Latin players, Rennie Stennett from the Canal Zone and Omar Moreno from Panama, and the Pirates also acquired Kent Tekulve as a free-agent after he was passed over by the draft. Mickey Rivers signed his first professional contract with Atlanta in 1969 but was quickly dealt to California later that same year. Other first-year players from this year who later became prominent major leaguers included James Rodney Richard (Astros), Bob Boone (Phillies), Ken Reitz and Al Hrabosky (Cardinals, Buddy Bell (Indians), Al Cowens (Royals), Bert Blyleven (Twins), and Jeff Burroughs (Senators).

The 1970 signing period has advanced the most players into the major leagues (134) and it marked the last year when athletes were signed into Baseball's ranks at an average rate of over 50 players per club. Two clubs in particular, Pittsburgh and Kansas City, helped to maintain this average as they signed 106 and 102 first-year players into their respective systems. These were the two largest annual signing classes for an individual club in any year of the sample. Both clubs found one outstanding player in their wholesale signing campaigns as the Pirates signed Dave Parker, and the Royals, Frank White. It could be argued that the White Sox found more talent from a much smaller pool of prospects. The Chicago club had an especially efficient year as eight of its 33 first-year prospects late-advanced into major league competition. Terry Forster, Rick Gossage and Bucky Dent became the most successful from this White Sox contingent. Other 1970 first-year players who later became significant major league performers were Bill Campbell, signed as a free-agent by Minnesota, Bill Madlock and Rick Waits (Senators), Doug DeCinces (Orioles), Rick Burleson (Red Sox), Chris Chambliss (Indians), Sixto Lezcano and Darrell Porter (Brewers), and Dave Kingman and Chris Spier (Giants). The year 1970 was also the year when Houston signed Clark Gillies, a prospect from Moose Jaw, Saskatchewan. Gillies soon gave up on his baseball career and instead became a starting member of the National Hockey League's New York Islanders.

The 1971 signing year was a relatively good one. The second highest proportion of major league players advanced from this year's pool of first-year prospects (10.79 percent) with a few of the successes developing into Baseball's best performers later in the decade. The clubs had now begun to sign fewer first-year players than ever before and most

clubs would continue to sign still fewer athletes throughout the remainder of the study period. The especially talented group of athletes who began their professional careers in 1971 included Jim Rice (Red Sox), Frank Tanana (Angels), George Brett (Royals), Ron Guidry (Yankees), Burt Hooton (Cubs), Steve Rogers (Expos), Mike Schmidt (Phillies), and Keith Hernandez (Cardinals). Probably the most unexpected success of 1971 was captured by the Chicago Cubs when they signed Bruce Sutter as a free-agent.

The group of first-year players signed in 1972 can only be classified as average. From this signing year forward to the 1977 class it becomes increasingly more difficult to judge the significance of the signing periods and an individual ballplayer's talent. As the saying goes, "only time will tell." A talented youth movement was ensured within the Montreal system when the Expos signed Gary Carter, Larry Parrish, and Ellis Valentine in 1972. The San Francisco pitching corps was greatly aided by the signing of John Montefusco, Bob Knepper, and Ed Halicki this same year. Willie Randolph and John Candelaria, both of Brooklyn, became members of Pittsburgh's organization while Rick Manning and Dennis Eckersley both signed with Cleveland. Scott McGregor and Tippy Martinez signed with the Yankees in 1972 but both pitchers became better known after they were dealt to Baltimore in 1976. Other significant players signed in 1972 included Claudell Washington and Chet Lemon (A's), Dennis Leonard (Royals), Randy Jones (Padres), and the late Lyman Bostock (Twins).

This sample's most immediate and celebrated ascent from amateur status to major league competition occurred in 1973 when the Texas Rangers signed 18 year old David Clyde to a professional contract and

immediately thrust him into major league competition as a starting pitcher. Clyde became an immediate gate attraction and money-maker for the destitute Ranger organization as curious spectators were drawn to see the youth pitch. Clyde, however, gained little from his exploitation but for the notoriety, a sore arm, and a losing pitcher's reputation. After spending a year and a half as a Ranger, Clyde was sent to the minors in 1975 and subsequently traded to Cleveland. He has since seen only limited action as a major leaguer. Other more impressive professional careers began in 1973 which were handled in a more orthodox fasion. National League fans were to later enjoy the talents of Warren Cromartie (Expos), Lee Mazzilli (Mets), Dave Winfield (Padres), and Jack Clark (Giants) while Mike Flanagan and Eddie Murray (Orioles), Fred Lynn and Butch Hobson (Red Sox), Robin Yount (Brewers), and Ron LeFlore (Tigers) became some of the more talented American League players. LeFlore's career is particularly unique as he was signed as a free-agent after a Tiger scout spotted him playing baseball in a Michigan prison reformatory.

The 1974 signing year included a player signed by California who's career might best be described as "what might have been . . ." Mike Miley, a shortstop and quarterback for Louisiana State University's baseball and football squads, was a top draft choice of the Angels in 1974. The Angels, in need of a steady performing shortstop, considered Miley to be an outstanding "can't miss" prospect but a 1977 auto accident abruptly ended Miley's life just as he appeared to be on the verge of becoming their regular shortstop. Miley's tragic death helped to create a situation where the Angels' management would spend the remainder of the decade futiley searching for a suitable replacement. Other clubs

were more fortunate with their 1974 first-year signings. Dennis Martinez and Rich Dauer (Orioles), Willie Wilson (Royals), Roy Smalley (Rangers), Bob Stanley (Red Sox), Butch Wynegar (Twins), and Mark Fidrych (Tigers) would later excel in the American League and Garry Templeton (Cardinals), Mike LaCoss (Reds), and Rick Sutcliffe (Dodgers) would gain fame as National League performes. The single-most efficient signing year for one club also occurred in 1974 when Milwaukee sent eight of its 22 first-year players into the major leagues. None of the eight players, advancing from one of thesmallest first-year signing classes of any individual club, have yet to become well-publicized stars but the occasion is significant for its marks the infancy of a successful rebuilding campaign within the Brewer organization.

The year 1975 was an all-time low for first-year players (858). This was also the year when there began a noticeable decline in the number of subsequent successes. The decline is directly attributable to the lack of time given these more recently signed players to advance entirely through the minor league system. Those 1975 first-year players who did advance rapidly through the minors and have shown signs of stardom at the major league level include Carney Lansford and Willie Mays Aikens (Angels), Lou Whitaker, Jason Thompson, and Dave Rozema (Tigers), Bump Wills (Rangers), Rich Gale (Royals), Andre Dawson (Expos), Gene Richards (Padres) and Don Robinson (Pirates).

The first-year player signings of 1976 already have yielded a few proven major league performers. Detroit continued its prosperous youth movement by signing Steve Kemp, Alan Trammel, and Jack Morris and rapidly entered them into major league competition while Lary Sorensen became one of the better pitchers in the American League in less than

three years of professional experience with Milwaukee. And, Kenny Landreaux, signed by California in 1976 and later dealt to Minnesota has also showed signs of brilliance during his brief major league career.

Two new American League franchises, Toronto and Seattle, began selecting first-year players as well as competing on the field in 1977. The existence of these expansion teams helped to raise the number of first-year players to its highest total since 1972. Two of this year's players rapidly advanced into the major leagues and each played a significant role in improving his club's competitiveness. Paul Molitor became Milwaukee's regular second baseman in 1978 and quickly achieved a reputation as being one of the best major league rookies of that year despite having less than one year of previous professional experience. Bob Welch of Los Angeles was another celebrated rookie from the 1977 signing class. Welch gained a great deal of notoriety when his 1978 pitching achievements helped the Dodgers capture the National League pennant.

Two Intriguing Conclusions

There seem to be two inconspicuous trends hidden within the annual first-year player data that are deserving of further mention. Although it is much too soon to be entirely certain, it appears as if the American League has narrowed the competitive gap and, in fact, may be in the process of overtaking the National League in both the quality and quantity of successful first-year player signings. For most of the past two decades a strong case could have been made supporting the National League's overall superiority. In general, the National League was more receptive to signing black and Latin ballplayers and its rosters were

commonly more youthfully oriented than those in the American League. Now, in 1980, the pendulum is swinging back in the junior circuit's favor. Less apparent racial differences currently exist between the two leagues (however, National League clubs continue to sign more Latins) and the recent successful advancement of young talent by American League clubs, especially by Baltimore, Detroit, Minnesota, and Milwaukee, has injected a youthful enthusiasm into American League competition.

This is not meant to infer that the National League rosters are void of young talent. On the contrary, the National League has a reasonable amount of youthful prospects and two of its clubs, Montreal and Houston, have recently become pennant contenders primarily through the use of young ballplayers, but the overall dominance of the National League seems to have been eroded. With many of the younger premier players currently performing in the American League (i.e., George Brett, Fred Lynn, Jim Rice, and Ron Guidry), superiority by the junior circuit may be on the horizon.

The second hidden trend involves those domestic players who entered Professional Baseball from the status of amateur free-agents. These players were free to negotiate with any interested club after all of the organizations, on advice from the scouting establishment, chose not to select them during the drafting process. All of the clubs do sign some free-agents each year, simply to fill their minor league systems. The intriguing fact is that this sample's tiny minority of successful former amateur free-agents includes some of Baseball's most outstanding contemporary relief pitchers. The talents of Jim Kern, Kent Tekulve, Bill Campbell, and Bruce Sutter were totally ignored during the draft but these four men subsequently developed into tremendously skillful

relievers. The careers of these four men suggest that amateur pitchers best equipped to become relievers in the professional game may possess qualities that are not easily detected by the scouting industry. Moreover, some of the best relievers often become effective only after they have developed their necessarily unique skills during a lengthy stint in the minor leagues and/or perfected a consistent "trick pitch." These four relievers are evidence of this. Kern and Tekulve each spent more than six years in the minors before becoming permanent major league bullpen fixtures while Campbell and Sutter advanced more quikcly with the aid of especially effective sinker ball pitches. One should not assume, however, that relief pitchers are the only individuals underestimated by the scouting establishments. Non-pitchers such as Toby Harrah and Andre Thornton (1967, Phillies), Enos Cabell (1968, Orioles), Dan Driessen (1969, Reds), Frank White (1970, Royals), Jerry Royster (1970, Dodgers), Larry Parrish (1972, Expos), and Claudell Washington (1972, A's) all became regular performers in the major leagues after being ignored during the draft but none of these men have as yet reached the accomplished heights of Kern, Tekulve, Campbell or Sutter. Generally speaking though, the scouts do a commendable job of judging potential talent. Only 148 of the sample's 4,316 domestic free-agents (3.43 percent) have advanced into the major leagues, far below the success rate of drafted players (1,019 successes from 7,207 drafted players, or 12.42 percent).

Individual Club Strategies

Each major league franchise operated a little differently when it came to signing first-year players into their respective systems. There

was a significant difference in the total number of prospects invested in by individual clubs as well as there being a contrast in the geographic make-up of club rosters. There were clubs that signed a great many home state or regionally proximate prospects while other organizations showed little deference toward acquiring players in a comprehensible geographic pattern. (See Figure 14.) And, in the end, organizations administered their signed prospects differently according to their systems's needs and quantity and quality of talent. Weaker clubs had a tendency to advance a greater proportion of their players into the major leagues in an "on the job training" approach, whereas the more competitive teams could often afford the luxury of sending only their finest young players into major league competition (Figure 16). Table XVI and Appendix C provide data that compare the various club strategies. A brief synopsis of each club's behavior follows.

The American League

The Baltimore Orioles organization followed a strategy common to many clubs by signing a large share of local players and also concentrating heavily in the abundant California market. Over one-fourth of Baltimore's first-year players were from California and half of these resided in Los Angeles County. Their local signing market included Maryland, Virginia, Pennsylvania, West Virginia, and North Carolina. The Orioles signed the third largest contingent of first-year players within the American League and they had the higest winning percentage of any club during the study. With an ample supply of prospects and a very successful major league club this organization was not forced to rush unproven youngsters into major league competition.

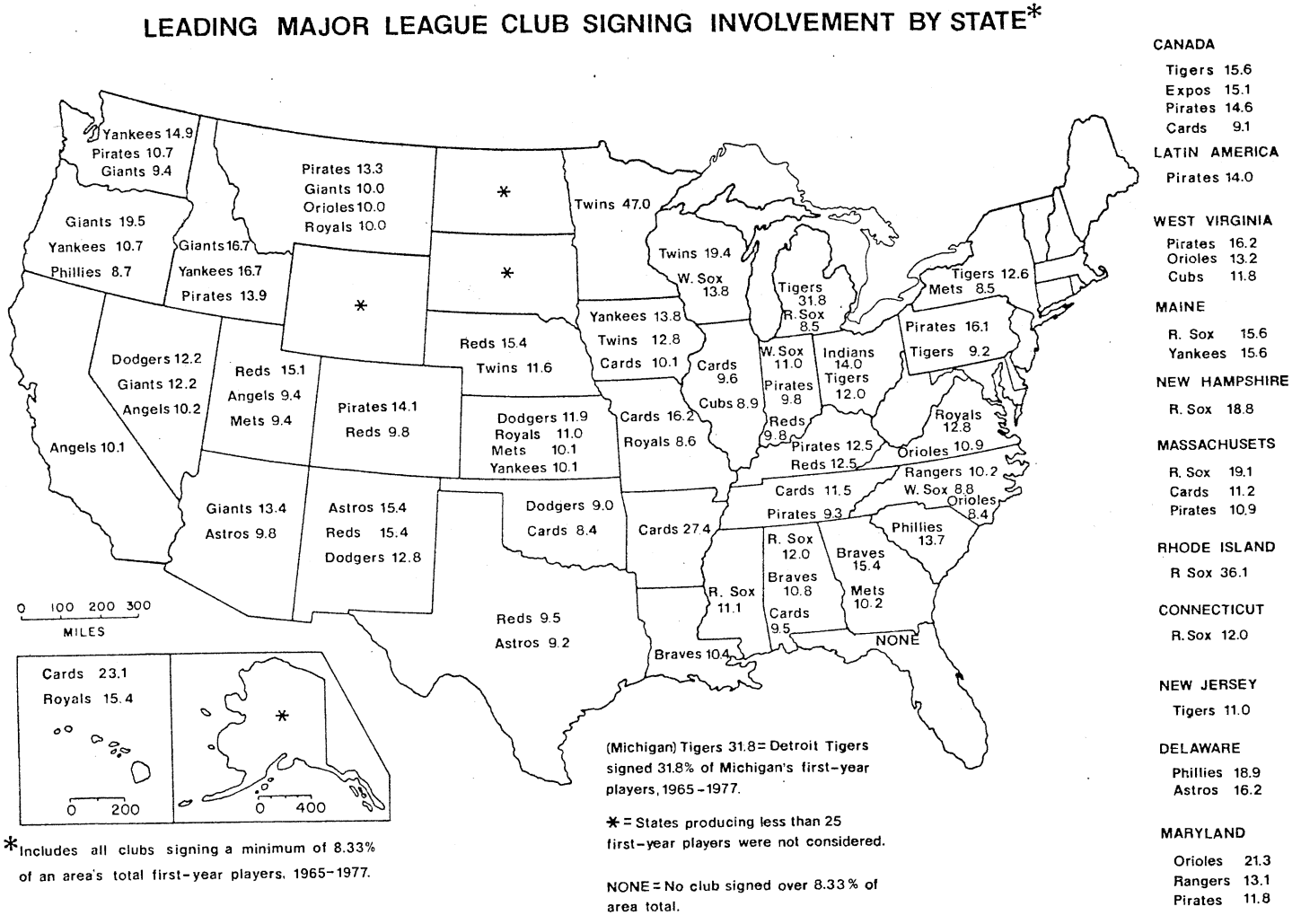

Figure 14. Leading Major League Club Signing Involvement by State

TABLE XVI

SIGNING AND SUCCESS STATISTICS FOR MAJOR LEAGUE CLUBS

American League Clubs	Won-Loss Rate 1965-1979	First-Year Players Signed	Average Annual Number of First-Year Players	Number of Successes	Percent Total Successes
Baltimore Orioles	.5807	660	50.8	49	7.42
Boston Red Sox	.5325	624	40.0	55	8.81
California Angels	.4765	542	41.7	56	10.33
Chicago White Sox	.4749	451	34.7	57	12.64
Cleveland Indians	.4642	547	42.1	44	8.04
Detroit Tigers	.5144	718	55.2	63	8.77
Kansas City Royals	.5163	608	60.8	41	6.73
Milwaukee Brewers	.4501	322	32.2	38	11.80
Minnesota Twins	.5226	730	56.2	54	7.40
New York Yankees	.5243	589	45.3	52	8.83
Oakland A's	.4951	476	36.6	43	9.03
Seattle Mariners	*	47	47.0	--	--
Texas Rangers	.4588	437	33.6	61	13.96
Toronto Blue Jays	*	27	27.0	--	--
American League Total	.5000	6778	44.5	6-3	9.04

TABLE XVI (Continued)

National League Clubs	Won-Loss Rate 1965-1979	First-Year Players Signed	Average Annual Number of First-Year Players	Number of Successes	Percent Total Successes
Atlanta Braves	.4720	552	42.5	55	9.96
Chicago Cubs	.4852	514	39.5	58	11.24
Cincinnati Reds	.5667	622	47.9	46	7.40
Houston Astros	.4741	509	39.2	46	9.04
Los Angeles Dodgers	.5498	565	43.5	62	10.97
Montreal Expos	.4489	426	42.6	38	8.92
New York Mets	.4580	694	53.4	66	9.51
Philadelphia Phillies	.4955	640	49.2	53	8.23
Pittsburgh Pirates	.5543	887	68.2	60	6.76
St. Louis Cardinals	.5136	785	60.4	61	7.78
San Diego Padres	.4035	286	28.6	40	13.98
San Francisco Giants	.5148	727	55.9	59	8.12
National League Total	.5000	7207	48.1	644	8.94
Major League Total	.5000	13985	46.3	1257	8.99

*Clubs only began play in 1977 and were not considered in this category.

It is not surprising that the Boston Red Sox were the most influential signing club in New England. This portion of the country is renowned for its support of the Red Sox, and the club reciprocated by being the top signing club in Massachusetts, Connecticut, Rhode Island, New Hampshire, and Maine. The Red Sox also were the top signing club in Alabama and Mississippi and the second-most active signer in Louisiana, thus displaying a regional trend that is most difficult to comprehend. Boston signed the most Latin players of any American League Club (60) and they also signed Win Remmerswaal from Holland in 1975 who performed briefly for the Red Sox during the 1979 season.

The California Angels are in a position where they obviously believe it is best to stay at home. Three hundred and eleven first-year players, nearly 60 percent of the club's total, were signed from within California and over one-half of these home state prospects were from Los Angeles or Orange County. This marked the most players signed by a club from any state. The Angels indicated only token interest elsewhere. Although they signed very few players from Latin America (23), four of their Latin Prospects were from Colombia, a country which produced only seven prospects during the entire 13 year period. The Angels owned one of the poorer winning percentages during the sample and they sent the American League's fourth highest propoetion of first-year players into the major leagues.

The Chicago White Sox signing and administrative strategies are good evidence that the club has not been one of Baseball's more financially stable organizations of late. The White Sox signed the third fewest first-year players per year in the American League and they advanced the league's second highest proportion of prospects into major

league action. They were the top signing club in Indiana, the second leading signer in Wisconsin, and the third highest signing club in Illinois. The White Sox showed relatively little interest in Latin America as they relied most heavily upon the California supply for their outside source of talent.

The Cleveland Indians were one of Baseball's more inept ballclubs during the study period. The Indians exhibited significantly more patience in advancing their prospects than many of the other poorly competitive clubs but this patience might have been necessitated by the fact that their prospects were simply not as talented as other clubs. The Tribe was the leading signer of Ohio prospects with over one-third of these from the Cleveland SMSA. They were also the second most involved club in Florida, a surprising fact considering that their spring training site has traditionally been in Arizona and that they currently have no rookie team in Florida.

Detroit's signing strategy was one of the more intriguing. Not only did Detroit show a tremendously heavy involvement within its home state but the Tigers also displayed an unmatched affinity for signing a great many prospects from the Northeast in general. The Tigers were the top signing club in New Jersey, New York, and Canada (with most of the Canadian players residing in Ontario) and the second leading signer of Ohio and Pennsylvania talent. Nearly 60 percent of Detroit's first-year players were from those six areas. The Tigers were one of the very few clubs to sign more Anandians than Latins. They signed one player from the Dominican Republic and a meager 13 Latins in all.

Despite being a late entry into the picture as a 1969 expansion club, the Kansas City Royals organization made a dramatic impact. The

Royals took the position that the most efficient way for them to become competitive was to sign as many first-year players as possible during their early existence. This method evidently was a sound one. By signing more first-year players per year than any American League club (60.8) Kansas City quickly became the most competitive of the four 1969 expansion clubs, due in large part to the success of these former first-year players. However, after signing as many as 102 players in 1970, the Royals drastically reduced their first-year signings to include only 90 prospects during the last three combined years of the sample. Thus, it will be interesting to see if this reduction has any effect upon Kansas City's future performance. From a geographic standpoint over 30 percent of their signings included California prospects and they were the leading signer of Virginia talent.

The Milwaukee Brewers also began as an expansion club in 1969 as the Seattle Pilots. The Brewer management did not follow the example of Kansas City's wholesale signing campaign. Instead, the Brewers signed the fewest first-year players per year as any American League club (32.2), approximately one-half as many prospects as Kansas City. From this small group of prospects the Brewers have advanced 38 successes. This smaller pool of minor league players makes for a less competitive system and one might argue that Milwaukee paid the price for having relatively few players within its system during their early existence. The Brewers were one of Baseball's least competitive teams before they invested heavily in a few veteran players who were available in the reentry draft. These high-priced veterans, coupled with some very talented youngsters, made the Brewers a serious pennant contender late in the 1970's. Despite their tendency to sign few amateur prospects,

Milwaukee signed the most Puerto Rican prospects of any club during the study period.

The Minnesota Twins present a regional signing strategy that dominates the signing of athletes from the upper Midwest. The Twins were the top signing club in Nebraska and Iowa, and they signed nearly 50 percent of Minnesota's amateur prospects. They are also heavily dependent upon the California supply as one-third of their prospects are from that state. Despite signing the most American League prospects (730) the Twins were one of the three clubs to sign only three players from Latin America. This extremely low Latin involvement is an especially significant departure from the club's past signing history. Before moving to Minnesota in 1961, this franchise has been based in Washington, D.C. and at that time the club was considered to be one of Baseball's leading Latin signers. More recently the Twins lost most of their best players through the re-entry draft but the club has shown a remarkable resiliancy to remain competitive with the aid of younger talent advancing from within their well-stocked farm system.

The New York Yankees showed a noticeable amount of interest in prospects from the Northwest. The Yankees were the top signing club in Washington and Idaho and the second most involved club in Oregon. The Yanks also signed more Iowa prospects than any other club. The club was fairly involved with local prospects as they signed the second most players from New Jersey and the third most from the state of New York. The Yankees were especially successful in the Dominican Republic as five of their 26 Dominican prospects became successes. New York's farm system has not been considered to be one of Baseball's best but the club

fielded one of the American League's better teams built primarily from effective trades and professional free-agent acquisitions.

The Oakland A's are an example of an organization that deteriorated to near extinction during the sample. The A's signed some exceptionally talented prospects during the 1960's and they reaped the benefits by becoming the American League's dominant club in the first half of the 1970's. During five of the last eight signing years however, Oakland reduced its first-year signings to less than 30 per year. Consequently, when Oakland began losing its regulars to the re-entry draft and through trades later in the decade there was not a sufficient talent base within its system to absorb the losses. As a result the A's immediately became one of Baseball's major embarrassments. This rapid image decline combined with the club's financial problems further affected Oakland's ability to sign much needed amateur talent. Rather than signing with the A's many amateur draftees chose to wait six months in hopes of being selected by another club in the next draft's secondary phase. Oakland is the only club in recent history to operate without an in-house scouting system as they depend entirely upon the Major League Scouting Bureau for prospect information. The A's signed over one-third of their prospects from California, during the study period.

The Texas Rangers began as an expansion club in 1961 when they were inserted into the Washington, D.C. market that had been vacated as a result of Washington's previous club moving to Minnesota. This second Washington franchise also departed the nation's capital at the close of the 1971 season and resettled in the Dallas-Ft. Worth area. The Senators-Rangers signed the second fewest first-year players per year as any American League club while advancing the league's second highest

total number of prospects into major league competition. This club has had financial difficulties throughout its existence and its strategy of signing very few prospects and then advancing a large share of them into the major leagues is an indication of these fiscal pressures. (This behavior is quite comparable to Milwaukee's administrative handling of their prospects.) The Senators-Rangers showed their disdain for the non-domestic supply of prospects by signing only three foreign players.

Because the Seattle Mariners and the Toronto Blue Jays only began signing first-year players in 1977 very little can be said concerning their strategies. Seattle signed a great deal more players than Toronto (Seattle - 47; Toronto - 27). The Mariners acquired most of their prospects from California, Florida, and Washington. The Blue Jays were the only club to sign a majority of non-United States players when they signed seven Canadians and seven Dominicans.

The National League

One of the clubs heavily involved with signing southern prospects is Atlanta. The Braves signed the most first-year players from Georgia and Louisiana and they were one of the top three signing clubs in Alabama, Tennessee, and Texas. They also displayed a concentrated effort in Latin America. The organization showed no carryover effect from being located in Milwaukee prior to 1966 as the Braves signed only two Wisconsin prospects and their involvement in the upper Midwest in general was minimal. Atlanta's annual signing figures indicate that the club is attempting to upgrade its farm system. They averaged less than 35 first-year player signings per year from 1968 through 1975 but during the last two years of the sample the Braves signed 47 and 46 prospects.

In contrast to Chicago's American League club, the Chicago Cubs displayed less of a regional interest in midwestern prospects. The Cubs were the second leading signer of Illinois prospects but otherwise their involvement was scattered. They did not sign a single player from the Dominican Republic and overall their number of signed Latin prospects was well below average. The Cubs signed the league's third fewest prospects per year and advanced the second highest proportion of successes. The Cubs, like Atlanta, significantly increased their number of signed prospects during the sample's final two years.

The Cincinnati Reds were the winningest National League team during the study period. The Cincinnati organization signed a higher than average number of prospects and, due to their highly successful major league club, they were not forced to advance unproven players into major league competition. The Reds exhibited an interest in local amateur players by being one of the top signing clubs in Ohio, Kentucky, and Indiana and they signed the most prospects from Florida, Texas, the Dakotas, Nebraska, Utah, and New Mexico. The Reds also displayed a tendency to be one of the most progressive clubs in unestablished foreign markets by signing three players each from Taiwan and Australia.

A club which improved its winning percentage during the study was Houston. The Astros signed the third largest contingent of Latin players by being heavily involved with Dominican and Venezuelan prospects. Like nearly every club, the Astros found a large share of their domestic talent in California. They were also the second leading signer of Texas, New Mexico, and Arizona talent. Houston significantly decreased its average number of first-year players during the final seven years of the sample and yet the club increased its competitiveness.

Much of the club's recent improvement is attributable to a bolstered pitching staff. It remains to be seen whether the Astros can develop enough talented everyday players from within their farm system to remain a consistent pennant contender.

The Los Angeles Dodgers were the top signing club in both Kansas and Oklahoma. The club signed most of its players from California and it had a greater than average success rate in Latin America. It was mentioned earlier in this chapter that the Dodgers may have had the most impressive single signing year of any club when, in 1968, they signed Bill Buckner, Ron Cey, Dave Lopes, and Steve Garvey among 12 future successes. The year of 1968 was just one of many good years for the Dodgers in the late 1960's when a large proportion of their prospects became successful major leaguers. The Dodgers followed a trend of many clubs by decreasing their first-year signings during the 1970's. Because of the veteran ballclub's contemporary competitiveness at the major league level their farm system decrease had no noticeable effect upon the club's success, until 1979. This past season the Dodgers suffered many injuries and the club quickly fell from contention when they had few talented replacements within their deflated system. Whether the Dodgers are able to remain competitive in the near future when many of their veterans will be facing retirement will greatly depend upon the success of their farm system.

The Montreal Expos entered into major league competition in 1969 as an expansion club. While their competitiveness has been limited during the study, with the aid of a recent organizational youth movement, the Expos have emerged as one of the National League's most talented young teams. Montreal signed the second most Canadian players (32) and they

exhibited the most widespread involvement within Canada by signing players from seven different provinces. Because the Canadian supply showed no increase during the period it appears as if Montreal is obtaining many of those Canadian ballplayers who would have signed with an American franchise prior to the Expos' existence.

The New York Mets' fortunes are told quite well by their annual success figures. Thirty-two of the Mets' 66 successes were advanced from the club's 1965-1967 signing years. This was the period when the "Amazing Mets" were being developed within their farm system. This team won a world championship in 1969 but has since fallen back to a level of consistent mediocrity. One of their main problems has been an ineffective minor league system. The Mets did not greatly decrease their first-year signings as so many clubs have, but the quality of their system must be severely questioned when it can provide only 34 major league players in 10 years for a team so desperately in need of talent. The Mets acquired approximately one-fifth of their prospects from California and they signed the second most first-year players of any club from New York, Georgia, and Puerto Rico.

The Philadelphia Phillies were one of the very few organizations to maintain a relatively constant number of first-year players entering into their system throughout the entire 13 year period. This constant stock of prospects provided the Phillies with a steady supply of young successes who helped to improve the club's ranking from one of a perennial loser to a pennant contender. The Phillies were the top signing club of Delaware and South Carolina prospects although they acquired the largest share of their players from California. The Phillies also

were involved in much of Latin America but as yet they have benefitted little from their Latin signings.

Pittsburgh was the most prolific signer of first-year players. In contrast to other clubs, the signing figures of this organization are extraordinary. The Pirates signed 887 players to first year contracts or an average of over 68 prospects per year during the study period. During the same period the Chicago White Sox and Texas Rangers each entered approximately one-half as many prospects into their respective systems. Pittsburgh has not significantly decreased this signing behavior in recent years as they have maintained a hefty average of over 62 new players per year since 1970. Because of the extreme total number of players signed by the Pirates, the club is a significant signing force anywhere baseball is played. They were the top signing club in Pennsylvania and West Virginia as well as signing a great share of the players in the Rocky Mountains and from the Northwest. However, the Pirates most concentrated effort was centered in the Caribbean. They signed 100 prospects from the Dominican Republic and a total of 170 Latins in all. No other club approached these figures. Obviously Pittsburgh has operated under the premise of "the more, the better." While this type of massive signing campaign may not be as initially selective as some, competition within a farm system is enhanced when a great many players are vying for a few positions. It could be argued that Pittsburgh's very competitive nature during this period was a product of this wholesale signing strategy.

Were it not for Pittsburgh's colossal signing figures the St. Louis Cardinals would have been the club to have signed the most first-year players. They signed approximately 100 less players than did

Pittsburgh, and, like the Pirates, the Cardinals were a significant signing force in the Caribbean. Besides adding a large share of California prospects into its system, St. Louis found a great many prospects within its own region. The Cards were the top signing club in Missouri, Illinois, Arkansas, and Tennessee and one of the most involved clubs in Oklahoma, Iowa, and Alabama. Probably much of this regional loyality is a product of St. Louis' long history of being Baseball's westernmost and southernmost major league city. The Cardinals may have been compelled to preserve their healthy minor league system in deference to Branch Rickey's beliefs. As general manager of the Cardinals the late Mr. Rickey reconstructed the club into a pennant contender during the 1920's with Baseball's initial employment of a minor league farm system. Ironically, Mr. Rickey was also a member of Pittsburgh's front office during the 1950's. His long term influence on these two clubs may be more significant than baseball fans realize.

An excellent club to contrast with both Pittsburgh and St. Louis is San Diego. The Padres are the National League's answer to the American League's Milwaukee Brewers. The Padres were a 1969 expansion club who appear to have since invested as little money and talent into their minor league system as any ballclub. What large sums of money this club has spent has gone for veteran ballplayers acquired through the re-entry draft. This is an expensive strategy that sometimes helps a club save face at the major league level for a brief spell, but without a substantial foundation of young players in its system, clubs like the Padras find that a consistent pennant contender is seldom build via the re-entry draft. One-third of those first-year players that San Diego

did sign resided in California. The Padres signed only three players from Latin America.

The San Francisco Giants signed the fourth most first-year players of any club. The Giants were the second leading signer of California prospects and in general they showed a greater than average western involvement. They were one of the leading signers in Arizona, Utah, Nevada, Oregon, Washington, Idaho, and Montana. The Giants also put forth a significant signing effort in Latin America. The Giants also invested in the seldom tapped amateur Oriental market by signing six players from Japan and one from Taiwan. San Francisco decreased their number of first-year signings in the latter stages of the sample but they maintained an average of 40 new prospects per year from 1973 through 1977.

A Summary of the Strategies

A comparison between the American and National Leagues indicates that the National League clubs signed over 400 more total prospects. They did this primarily by signing a great many more amateur free-agents than the American League. Most of these free-agents were foreign players, specifically Latin American players, an area where many National League clubs were particularly involved. In fact, the National League signed 70 percent of the Latin supply with seven of its clubs (Pittsburgh, St. Louis, Houston, San Francisco, Philadelphia. New York, and Atlanta) signing more Latins than Boston, the leading American League club in the Caribbean.

Two general relationships were intimated during the individual club synopses that deserve additional review. The first one involves the association between a club's signing strategy and its playing

performance. It was found that a club's degree of competitiveness (measured by its win-loss percentage, 1965-1979) is, in part, dependent upon the number of prospects the club has within its organization (measured by the annual average number of first-year players signed from 1965 through 1977).

A scatter diagram of the relation illustrates the position of each club (Figure 15). Most of the clubs either fall within quadrant II or III. A club located in quadrant III signed a less than average number of first-year players and won less than 50 percent of its games. The San Diego Padres illustrate this behavior at its most extreme. A club located in quadrant II signed a greater than average share of prospects and won more than 50 percent of its game. The Pittsburgh Pirates present an example of this behavior. The New York Mets club was this relationship's most obvious anomaly. Despite signing more than its share of prospects the Mets owned one of the lower won-loss percentages of the period.

The second relationship concerns the proportion of players that an organization chooses to advance into the major leagues. It was found that a club which advanced a greater than average proportion of its former first-year players into the major leagues generally had a poorer competitive team at the major league level and, conversely, a club which advanced a small share of its prospects into the major leagues was normally successful as a major league competitor.

The relation's scatter diagram again reveals the San Diego Padres organization to be a prime example of how not to administer a ballclub (Figure 16). Joining the Padres in quadrant IV are other clubs who, in essence, were forced out of necessity to send a greater share of

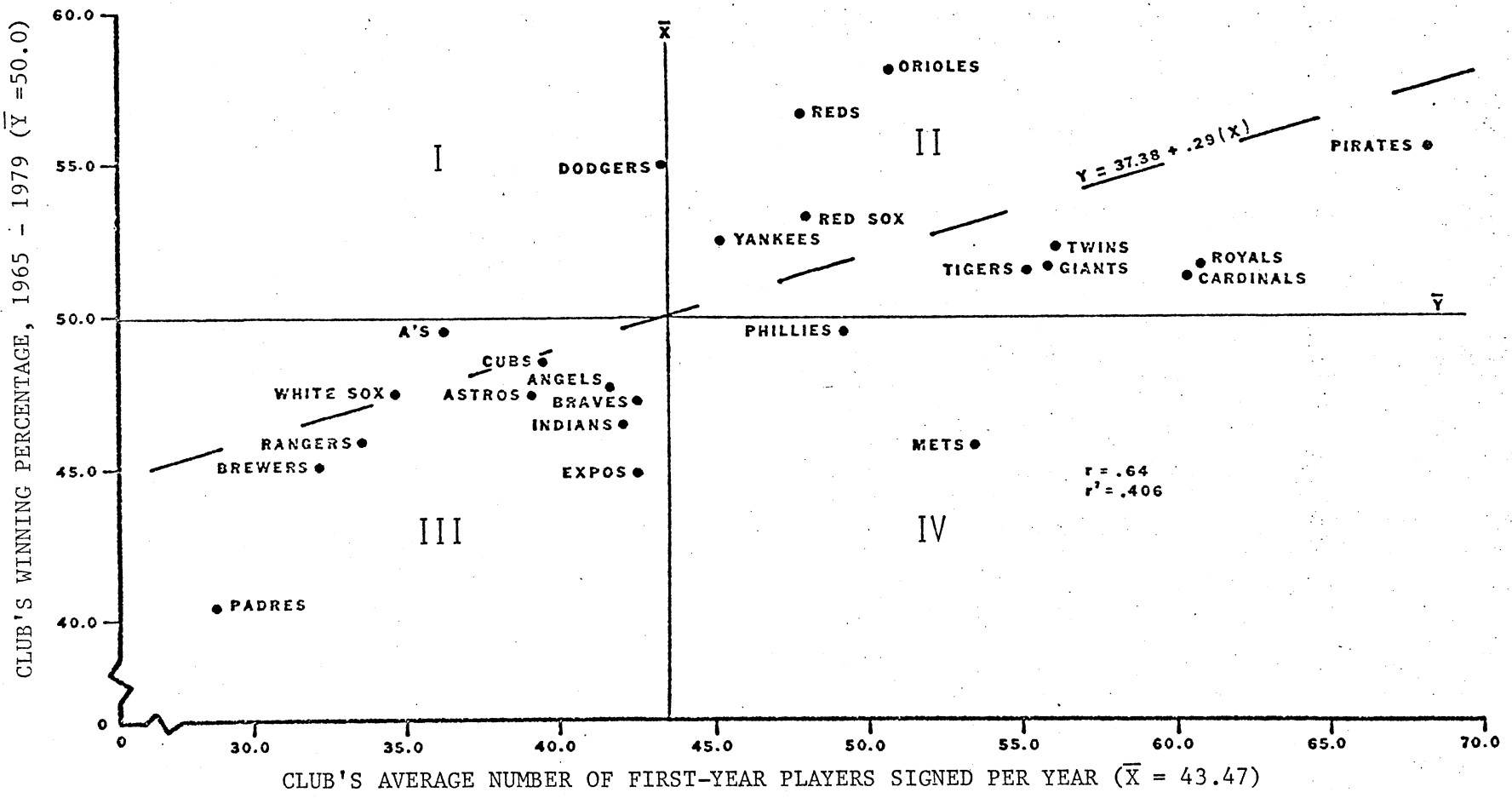

Figure 15. The Relationship Between a Club's Signing Strategy and Playing Performance

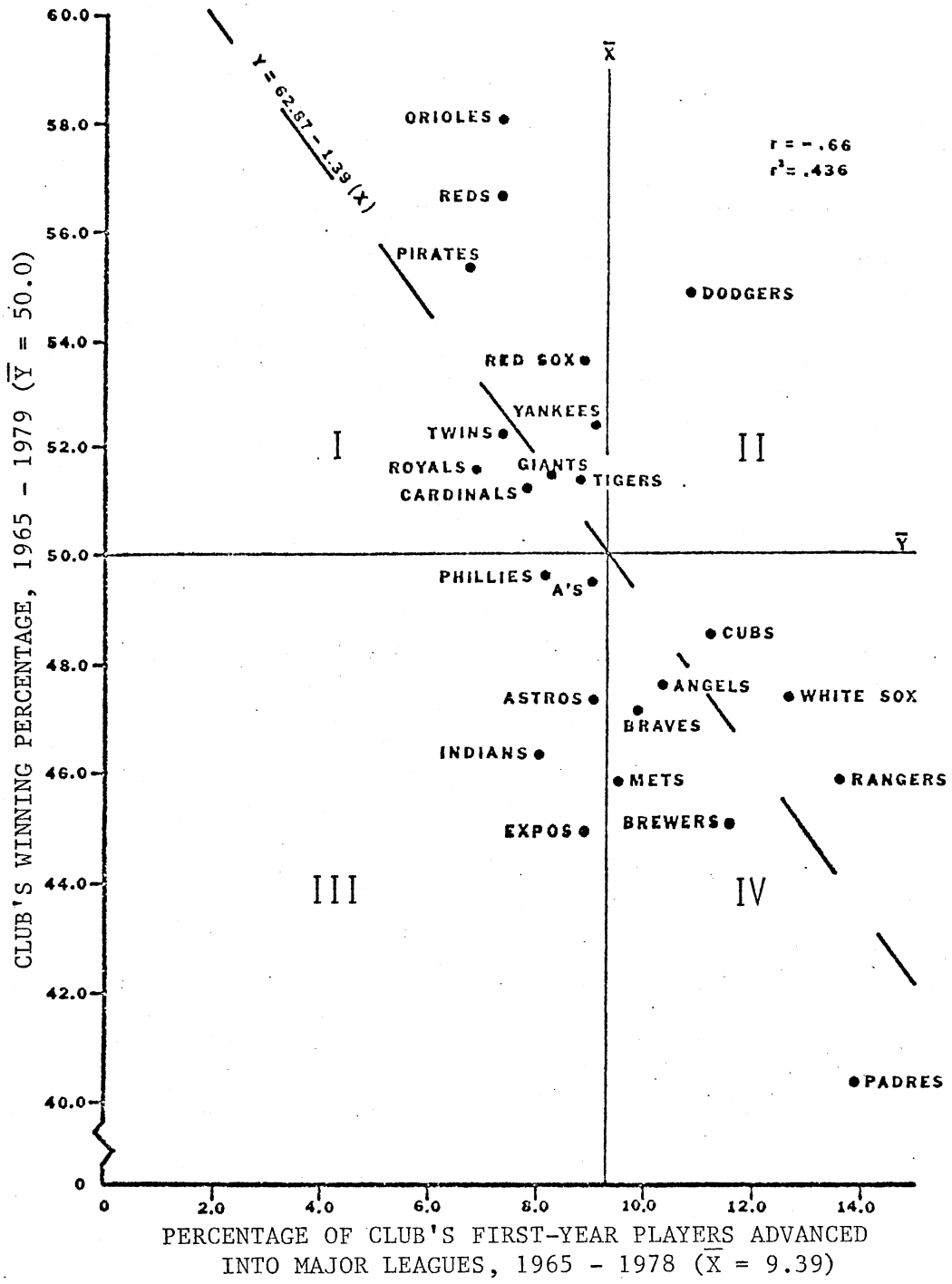

Figure 16. The Relationship Between a Club's Administrative Behavior and Playing Performance

prospects into major league competition before these players had been properly trained at the minor league level. These clubs suffered the consequences of losing more than half of their games. Baltimore, Cincinnati, and Pittsburgh are examples of more fortunate ballclubs. They were able to remain quite competitive throughout the period while advancing only their very best athletes into major league competition. Two clubs who were furtherest from following this trend were Cleveland and Los Angeles. The Indians sent a relatively small amount of their prospects into the majors despite having consistently mediocre seasons. On the other hand, the Dodgers were able to remain a contending club in spite of having only an average supply of prospects and sending a greater than normal share of them into the big leagues.

CHAPTER VIII

CONCLUDING REMARKS

Analysis Summary

This research has focused on a few very significant geographical aspects of Professional Baseball. The amateur playing origins of 13,985 of the game's contemporary players have been analyzed in order to determine the total and per capita ballplayer production capacities of various areas. After the initial player analysis a group of 1,257 players were separated from the total sample by virtue of their subsequent advancement into the major leagues - the highest competitive level in Professional Baseball. This smaller group of successful prospects was used as an indicator of an area's ability to produce the highest quality prospects. A comparison between the total and major league player samples determined the actual productive success of an area. In addition, the major league clubs were examined to characterize each club by its signing habits and the subsequent management of its signed prospects.

A few general summarizing comments concerning my most significant findings are appropriate. Southern California was found to be the dominant player supply area for the professional clubs. This was the only extensive region in the United States that uniformly produced players at a rate well above the national norm. An investigation of

counties and metropolitan areas revealed that player production took place throughout the country. Outside of California high production appeared to be a localized phenomenon, not based on any strict regionalism. It was hypothesized that the degree of community support, financial and otherwise, was probably most responsible for an area's productivity. Climate also appeared to be an obvious factor. Generally the northern states were poorer producers than southern states. However, the climate variable was considered to be secondary to the community support variable in terms of influencing an area's productivity. Some communities in the North produced well above the national norm while numerous southern communities were mediocre producers. The mixture of strong societal support with a favorable climate made Latin America an important player producing area. The Dominican Republic and Puerto Rico were especially significant foreign suppliers. Latin players generally advanced into the major leagues at a rate below that of domestic players but this did not deter some clubs from depending relatively heavily upon the Latin player market.

The spatial distribution of baseball scouts was also believed to have had some effect upon an area's successful productivity. In areas where a relatively high proportion of scouts resided there was often an overestimation of that region's player talent. This was especially true in Missouri, a state that produced first-year players equal to the national rate but advanced a comparatively small proportion of its prospects into the major leagues. Also, much of the Northeast, another heavily scouted area, tended to be a poor advancer of major league performers.

There was a wide variety of major league club signing strategies but two tactics were commonly employed. Most clubs used California as their principal supply area and many also acquired a large proportion of local players. This was personified best by the Minnesota Twins. They signed nearly one-half of the prospects from Minnesota and surrounding states and a higher than average proportion of California-bred players. The Detroit Tigers displayed a considerable involvement with the Michigan amateur player market and in the Northeast in general. The Pittsburgh Pirates far surpassed other clubs by their dependency upon Latin prospects. On the whole the National League was more heavily involved in the Caribbean player market than were American League clubs.

The reasons for a major league club's competitive success, or lack thereof, were more clearly understood when it was revealed that the number of signed prospects was directly related to a club's competitiveness. Clubs that annually signed a great many prospects were those who remained competitive throughout the study period. Conversely, those clubs which continually signed a less than average number of prospects rarely found themselves in pennant contention. Along this line it was also shown that the perennially weaker clubs were more likely to advance a greater proportion of their prospects into the major leagues than those clubs regularly vying for first place.

Future Research Considerations

Numerous questions are often created that go unanswered or that are only answered superficially in pioneering research. This unprecedented investigation of Professional Baseball is no exception. Some of the more perplexing uncertainties produced during this study involve

the explanatory variables (community, climate, and scouting) proposed as influencing player production. In essence, these specific factors should only be considered as hypotheses at this juncture. While it seems reasonable to assume that their influence is substantial, the degree to which these variables affect production is not at all clear. An attempt should be made to control for and quantify these and other possible explanatory variables to scientifically determine their actual influence and how they might spatially vary. This could be done through a series of in-depth community case studies. I would especially like to see an intensive investigation of the status of amateur baseball in southern California and a comparison of these findings with those from a similar investigating procedure of an extremely low player producing area.

A great deal more is to be learned about Baseball's scouting industry. This research has barely scratched the surface of this geographically dynamic system. How the present spatial distribution of scouts has evolved and how the individual club and Major League Scouting Bureau staffs might be rearranged in order to become more efficient are tasks that the sports geographer should pursue in the future. Related to this approach would be a more thorough investigation of each club's scouting and administrative behavior. With tighter financial constraints being forced upon Professional Baseball's management caused by inflation and skyrocketing player salaries, clubs may wish to re-evaluate their strategies. If a comprehensive study of Baseball and its externalities is initiated in the future it would be most beneficial to review the subject from a geographic perspective.

Further research of Professional Baseball might include a survey of its increasing dependency upon the college player market. There are those who believe that college baseball will totally replace the lower classified minor league system during the remainder of this century. Any increased interaction between baseball's professionals and collegians might prove to be especially suitable for those interested in investigating the changing processes of the game's spatial organization.

An aspect previously mentioned in this thesis as needing more study concerns the black baseball player. Determining the successful advancement rate of black players, whether blacks currently face participatory discrimination at any competitive level, professional or amateur, and how discrimination might spatially exist could prove to be rewarding research. A general comparison of inter-city baseball participation versus suburban and/or rural involvement could be incorporated with the black player investigation.

This author is not so naive to think that the 13 year sample of first-year players examined in this research completely discloses the entire story of quality baseball participation. Continued monitoring of first-year player signings would reveal on-going production and club signing trends, add to an already significant amount of information, and create a more definitive picture regarding the success of the more recently sampled athletes. In conjunction with a continuation of sampled first-year professionals, more consideration should be given to the evaluation of collegiate rosters, especially now that college baseball's importance is on the upswing.

A final future research proposal involves combining the player origin data of this research with that previously produced from similar

examinations of quality high school football and basketball participation. Because these three sports are generally considered to be the most popular national team sports it might prove fruitful to spatially examine the aggregation of this participatory data. A diversification index similar to those used by economic geographers in their evaluation of employment structures of cities and states could be employed to determine how these three sports interact in various areas of the country.

The long list of necessary future research further substantiates the extensiveness and importance of the sub-discipline of sports geography. There remains so much to be done and, at present, so few to do the work. It is my hope that this research might prove to be the spawning grounds for a great deal more geographically-related interest and research of baseball and other sports.

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APPENDIXES

APPENDIX A

PLAYER PRODUCTION FIGURES BY STATE AND FOREIGN COUNTRY

State or Foreign Country	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Alabama	241	1.14	21	1.07	.94
Alaska	3	.16	-	-	-
Arizona	179	1.64	22	2.18	1.33
Arkansas	73	.62	4	.37	.60
California	3,066	2.50	379	3.33	1.33
Colorado	92	.68	6	.48	.71
Connecticut	183	.98	9	.52	.53
Delaware	37	1.10	1	.32	.29
D.C.	14	.30	1	.23	.77
Florida	678	1.62	60	1.55	.96
Georgia	285	1.01	19	.73	.72
Hawaii	26	.55	3	.69	1.25
Idaho	36	.82	2	.49	.60
Illinois	542	.79	49	.77	.97
Indiana	173	.54	13	.44	.81
Iowa	109	.63	9	.56	.89
Kansas	109	.79	9	.70	.89
Kentucky	104	.52	11	.60	1.15
Louisiana	183	.82	18	.87	1.06
Maine	45	.74	4	.71	.96
Maryland	221	.92	9	.40	.44
Massachusetts	304	.87	19	.59	.68
Michigan	422	.77	50	.99	1.29
Minnesota	166	.71	15	.66	.93
Mississippi	99	.73	9	.71	.97
Missouri	290	1.01	18	.68	.67
Montana	30	.70	3	.76	1.09
Nebraska	52	.57	6	.71	1.24
Nevada	49	1.63	2	.72	.44
New Hampshire	32	.70	3	.71	1.01
New Jersey	438	.99	27	.66	.67
New Mexico	39	.62	2	.35	.56
New York	762	.68	47	.45	.66
North Carolina	285	.91	20	.69	.76
North Dakota	14	.37	1	.28	.76
Ohio	501	.76	47	.77	1.01
Oklahoma	167	1.06	22	1.51	1.42
Oregon	149	1.16	11	.92	.79
Pennsylvania	597	.82	44	.65	.79
Rhode Island	36	.62	3	.56	.90
South Carolina	146	.92	14	.95	1.03
South Dakota	16	.39	1	.26	.67

State or Foreign Country	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Tennesse	183	.76	12	.54	.71
Texas	545	.79	62	.97	1.23
Utah	53	.81	7	1.16	1.43
Vermont	11	.40	-	-	-
Virginia	266	.93	22	.83	.89
Washington	235	1.12	24	1.24	1.11
West Virginia	68	.63	3	.30	.48
Wisconsin	160	.59	18	.72	1.22
Wyoming	9	.44	-	-	-
(U.S. Totals)	12,544	1.00	1,162	1.00	1.00
Alberta	7	.07	1	.11	1.57
British Columbia	44	.34	1	.07	.21
Manitoba	9	.15	-	-	-
Maritime Prov.	10	.08	-	-	-
Ontario	99	.21	6	.12	.57
Quebec	35	.09	-	-	-
Saskatchewan	8	.13	1	.18	1.38
(Canada Totals)	212	.16	9	.07	.44
Aruba	3	.83	-	-	-
Australia	5	.01	-	-	-
Bahamas	30	3.17	1	1.12	.35
Canal Zone	17	4.93	1	3.13	.64
Colombia	7	*	1	*	1.75
Costa Rica	1	.01	-	-	-
Cuba	1	*	-	-	-
Dominican Republic	548	2.10	32	1.32	.63
Guatemala	1	*	-	-	-
Holland	1	*	-	-	-
Japan	6	*	-	-	-
Mexico	1	*	-	-	-
Nicaragua	30	.25	2	.18	.72
Panama	32	.36	3	.35	.97
Puerto Rico	323	1.90	36	2.28	1.20
South Africa	1	*	-	-	-
Taiwan	4	*	-	-	-

State or Foreign Country	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Venezuela	204	.32	9	.14	.44
Virgin Islands	14	3.45	1	2.65	.77
(Foreign Totals)	1,441	*	95	*	.67
Total	13,985	*	1,257	*	.95

*Less than .01.

APPENDIX B

PLAYER PRODUCTION FIGURES BY INDIVIDUAL SMSA

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Abilene, Tex.	7	1.00	2	3.08	3.08
Akron, Ohio	12	.29	2	.51	1.76
Albany, Ga.	13	2.36	1	1.76	.75
Albany-Schenectady-Troy, N.Y.	36	.80	1	.23	.29
Albuquerque, N.M.	14	.72	-	-	-
Allentown-Bethlehem-Easton, Pa.-N.J.	31	.93	2	.63	.68
Altoona, Pa.	7	.84	-	-	-
Amarillo, Tex.	9	1.01	-	-	-
Anaheim-Santa Ana-Garden Grove, Calif.	283	3.24	29	3.59	1.11
Anderson, Ind.	1	.12	-	-	-
Ann Arbor, Mich.	10	.69	1	.74	1.07
Appleton-Oshkosh, Wis.	12	.70	2	1.27	1.81
Asheville, N.C.	16	1.79	2	2.41	1.35
Atlanta, Ga.	112	1.31	11	1.39	1.06
Atlantic City, N.J.	12	1.11	1	1.00	.90
Augusta, Ga.-S.C.	6	.38	-	-	-
Austin, Tex.	21	1.15	4	2.38	2.07
Bakersfield, Calif.	63	3.11	5	2.67	.86
Baltimore, Md.	107	.85	5	.42	.49
Baton Rouge, La.	23	1.31	2	1.23	.94
Bay City, Mich.	3	.42	-	-	-
Beaumont-Port Arthur-Orange, Tex.	13	.67	1	.54	.81
Billings, Mont.	12	2.23	2	4.02	1.80
Biloxi-Gulfport, Miss.	7	.85	1	1.30	1.53
Binghampton, N.Y.-Pa.	9	.48	-	-	-
Birmingham, Ala.	84	1.85	12	2.85	1.54
Bloomington-Normal, Ill.	5	.78	1	1.68	2.15
Boise City, Idaho	6	.87	-	-	-
Boston, Mass.	153	.90	5	.32	.36
Bridgeport, Conn.	33	1.37	1	.43	.32
Bristol, Conn.	3	.74	-	-	-
Brockton, Mass.	10	.85	-	-	-
Brownsville-Harlingen-San Benito, Tex.	3	.35	1	1.25	3.57
Bryan-College Station, Tex.	1	.28	-	-	-
Buffalo, N.Y.	76	.91	4	.51	.56
Canton, Ohio	10	.44	1	.47	1.07
Cedar Rapids, Iowa	4	.40	-	-	-
Champaign-Urbana, Ill.	1	.10	-	-	-
Charleston, S.C.	14	.75	1	.56	.75
Charleston, W. Va.	13	.92	-	-	-

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Charlotte, N.C.	33	1.31	3	1.28	.98
Chattanooga, Tenn.-Ga.	28	1.49	-	-	-
Chicago, Ill.	345	.80	28	.70	.88
Cincinnati, Ohio-Ky.-Ind.	124	1.45	11	1.39	.96
Cleveland, Ohio	76	.60	9	.76	1.27
Colorado Springs, Colo.	10	.69	2	1.48	2.14
Columbia, Mo.	3	.60	-	-	-
Columbus, Ga.-Ala.	20	1.36	-	-	-
Columbus, Ohio	36	.64	7	1.34	2.09
Corpus Christi, Tex.	16	.91	-	-	-
Dallas, Tex.	56	.58	6	.67	1.16
Danbury, Conn.	2	.41	-	-	-
Davenport-Rock Island-Moline, Iowa-Ill.	13	.58	-	-	-
Dayton, Ohio	45	.86	3	.62	.72
Decatur, Ill.	17	2.21	3	4.21	1.90
Denver, Colo.	61	.81	3	.42	.52
Des Moines, Iowa	10	.57	-	-	-
Detroit, Mich.	252	.98	32	1.34	1.37
Dubuque, Iowa	5	.90	-	-	-
Duluth-Superior, Minn.-Wis.	11	.67	-	-	-
Durham, N.C.	5	.43	-	-	-
El Paso, Tex.	14	.63	2	.97	1.54
Erie, Pa.	16	.99	-	-	-
Eugene, Oreg.	24	1.83	-	-	-
Evansville, Ind.-Ky.	19	1.33	-	-	-
Fall River, Mass.-R.I.	13	1.41	2	2.34	1.66
Fargo-Moorhead, N. Dak.-Minn.	3	.40	-	-	-
Fayetteville, N.C.	7	.54	-	-	-
Fitchburg-Leominister, Mass.	1	.17	-	-	-
Flint, Mich.	19	.62	3	1.05	1.69
Fort Lauderdale-Hollywood, Fla.	47	1.23	2	.57	.46
Fort Smith, Ark.-Okla.	4	.40	1	1.09	2.73
Fort Wayne, Ind.	9	.52	1	.62	1.19
Fort Worth, Tex.	45	.96	2	.46	.48
Fresno, Calif.	91	3.58	9	3.82	1.07
Gadsden, Ala.	9	1.54	-	-	-
Gainesville, Fla.	4	.62	-	-	-
Galveston-Texas City, Tex.	9	.86	2	2.06	2.40

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Gary-Hammond-East Chicago, Ind.	28	.72	4	1.11	1.54
Grand Rapids, Mich.	19	.57	4	1.30	2.28
Great Falls, Mont.	6	1.19	-	-	-
Green Bay, Wis.	1	.10	-	-	-
Greensboro-Winston-Salem-High Point, N.C.	34	.92	1	.28	.30
Greenville, S.C.	16	.87	-	-	-
Hamilton-Middletown, Ohio	18	1.29	2	1.55	1.20
Harrisburg, Pa.	33	1.30	1	.42	.32
Hartford, Conn.	28	.68	1	.26	.38
Honolulu, Hawaii	19	.49	3	.84	1.71
Houston, Tex.	116	.95	13	1.14	1.20
Huntington-Ashland, W. Va.-Ky.-Ohio	8	.51	1	.69	1.35
Huntsville, Ala.	9	.64	-	-	-
Indianapolis, Ind.	30	.40	2	.32	.73
Jackson, Mich.	6	.68	-	-	-
Jacksonville, Fla.	42	1.29	2	.65	.50
Jersey City, N.J.	35	.93	3	.86	.92
Johnstown, Pa.	18	1.11	2	1.34	1.21
Kalamazoo, Mich.	8	.64	2	1.74	2.72
Kansas City, Mo.-Kans.	100	1.30	5	.69	.53
Kenosha, Wis.	7	.96	1	1.49	1.55
Knoxville, Tenn.	22	.89	1	.42	.47
LaCrosse, Wis.	7	1.41	1	2.18	1.55
Lafayette, La.	3	.44	1	1.60	3.64
Lafayette-West Lafayett, Ind.	6	.89	-	-	-
Lake Charles, La.	9	1.01	-	-	-
Lancaster, Pa.	15	.76	3	1.65	2.17
Lansing, Mich.	13	.56	-	-	-
Laredo, Tex.	-	-	-	-	-
Las Vegas, Nev.	28	1.66	1	.63	.38
Lawrence-Haverhill, Mass.-N.H.	6	.42	-	-	-
Lawton, Okla.	6	.90	1	1.62	1.80
Lewiston-Auburn, Maine	7	1.25	1	2.41	1.93
Lexington, Ky.	11	1.03	2	2.01	1.95
Lima, Ohio	10	.95	3	3.06	3.22
Lincoln, Neb.	5	.48	-	-	-
Little Rock-North Little Rock, Ark.	24	1.21	4	2.16	1.79
Lorain-Elyria, Ohio	9	.57	-	-	-
Los Angeles-Long Beach, Calif.	1,152	2.66	1.62	4.04	1.52

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Louisville, Ky.-Ind.	23	.45	-	-	-
Lowell, Mass.	15	1.14	1	.81	.71
Lubbock, Tex.	10	.91	1	.98	1.08
Lynchburg, Va.	10	1.31	2	2.83	2.16
Macon, Ga.	18	1.42	1	.84	.59
Madison, Wis.	6	.34	1	.60	1.76
Manchester, N.H.	5	.75	-	-	-
Mansfield, Ohio	4	.50	-	-	-
McAllen-Pharr-Edinburg, Tex.	4	.36	-	-	-
Memphis, Tenn.-Ark.	42	.89	3	.67	.75
Meriden, Conn.	3	.87	-	-	-
Miami, Fla.	142	1.82	16	2.22	1.22
Midland, Tex	2	.50	-	-	-
Milwaukee, Wis.	32	.37	2	.25	.68
Minneapolis-St. Paul, Minn.	93	.83	9	.86	1.04
Mobile, Ala.	57	2.46	5	2.32	.94
Modesto, Calif.	24	2.00	2	1.81	.91
Monroe, La.	7	.99	-	-	-
Montgomery, Ala.	8	.65	1	.86	1.32
Muncie, Ind.	3	.38	-	-	-
Muskegon-Muskegon Heights, Mich.	5	.52	-	-	-
Nashua, N.H.	-	-	-	-	-
Nashville-Davidson, Tenn.	29	.87	4	1.28	1.47
New Bedford, Mass.	4	.43	-	-	-
New Britain, Conn.	7	.78	-	-	-
New Haven, Conn.	22	1.00	-	-	-
New London-Groton-Norwich, Conn.	16	1.25	-	-	-
New Orleans, La.	64	.99	5	.83	.84
New York, N.Y.	483	.68	33	.49	.73
Newark, N.J.	105	.92	10	.93	1.01
Newport News-Hampton, Va.	21	1.17	2	1.20	1.03
Norfolk-Portsmouth, Va.	33	.80	2	.51	.65
Norwalk, Conn	9	1.22	-	-	-
Odessa, Tex.	9	1.59	1	1.89	1.19
Ogden, Utah	8	1.03	2	2.78	2.70
Oklahoma City, Okla.	43	1.09	6	1.64	1.50
Omaha, Nebr.-Iowa	34	1.02	5	1.62	1.59
Orlando, Fla.	44	1.67	3	1.23	.74
Owensboro, Ky.	5	1.02	-	-	-
Oxnard-Ventura, Calif.	57	2.46	6	2.80	1.14

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Paterson-Clifton-Passaic, N.J.	77	.92	2	.25	.27
Pensacola, Fla.	34	2.27	7	5.04	2.22
Peoria, Ill.	12	.57	1	.51	.90
Petersburg-Colonial Heights, Va.	8	1.01	1	1.35	1.34
Philadelphia, Pa.-N.J.	207	.70	14	.51	.73
Phoenix, Ariz.	120	2.02	15	2.72	1.35
Pine Bluff, Ark.	4	.76	-	-	-
Pittsburgh, Pa.	126	.85	13	.95	1.12
Pittsfield, Mass.	11	2.24	1	2.19	.98
Portland, Maine	23	2.64	2	2.47	.94
Portland, Oreg.	84	1.35	7	1.21	.90
Providence-Pawtucket-Warwick, R.I.-Mass.	32	.57	3	.56	.98
Provo-Orem, Utah	12	1.42	1	1.27	.89
Pueblo, Colo.	5	.69	-	-	-
Racine, Wis.	14	1.33	3	3.08	2.32
Raliegh, N.C.	7	.50	-	-	-
Reading, Pa.	9	.49	-	-	-
Reno, Nev.	11	1.48	-	-	-
Richmond, Va.	38	1.19	4	1.35	1.13
Roanoke, Va.	4	.36	1	.97	2.69
Rochester, Minn.	3	.58	-	-	-
Rochester, N.Y.	32	.59	-	-	-
Rockford, Ill.	5	.33	-	-	-
Sacramento, Calif.	159	3.23	25	5.48	1.70
Saginaw, Mich.	8	.59	1	.80	1.36
St. Joseph, Mo.	7	1.31	-	-	-
St. Louis, Mo.-Ill.	162	1.11	12	.88	.79
Salem, Oreg.	8	.70	1	.93	1.33
Salinas-Monterey, Calif.	20	1.30	1	.70	.54
Salt Lake City, Utah	29	.84	4	1.25	1.49
San Angelo, Tex.	5	1.14	-	-	-
San Antonio, Tex.	43	.81	7	1.42	1.75
San Bernardino-Riverside-Ontario, Calif.	156	2.22	15	2.30	1.04
San Diego, Calif.	226	2.70	26	3.36	1.25
San Francisco-Oakland, Calif.	352	1.84	45	2.53	1.56
San Jose, Calif.	151	2.30	16	2.64	1.15
Santa Barbara, Calif.	41	2.52	5	3.32	1.32
Santa Rosa, Calif.	14	1.11	4	3.43	3.09

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Savannah, Ga.	13	1.12	-	-	-
Scranton, Pa.	17	1.18	-	-	-
Seattle-Everett, Wash.	100	1.13	13	1.60	1.42
Sherman-Denison, Tex.	2	.39	-	-	-
Shreveport, La.	21	1.16	1	.60	.52
Sioux City, Iowa-Nebr.	4	.56	-	-	-
Sioux Falls, S. Dak.	4	.68	-	-	-
South Bend, Ind.	15	.87	-	-	-
Spokane, Wash.	27	1.53	2	1.21	.79
Springfield, Ill.	7	.70	3	3.26	4.66
Springfield, Mo.	28	2.97	3	3.44	1.16
Springfield, Ohio	9	.93	1	1.12	1.20
Springfield-Chicopee-Holyoke, Mass.-Conn.	25	.76	-	-	-
Stamford, Conn.	12	.94	1	.84	.89
Steubenville-Weirton, Ohio-W. Va.	11	1.08	-	-	-
Stockton, Calif.	45	2.52	3	1.81	.72
Syracuse, N.Y.	23	.59	3	.83	1.41
Tacoma, Wash.	21	.83	2	.85	1.02
Tallahassee, Fla.	8	1.26	1	1.70	1.35
Tampa-St. Petersburg, Fla.	141	2.26	12	2.07	.92
Terre Haute, Ind.	7	.65	-	-	-
Texarkana, Tex.-Ark.	5	.80	-	-	-
Toledo, Ohio-Mich.	31	.73	2	.49	.67
Topeka, Kans.	12	1.26	2	2.26	1.79
Trenton, N.J.	31	1.66	1	.58	.35
Tucson, Ariz.	39	1.80	6	3.00	1.67
Tulsa, Okla.	50	1.70	6	2.20	1.29
Tuscaloosa, Ala.	8	1.12	1	1.51	1.35
Tyler, Tex.	3	.50	2	3.62	7.24
Utica-Rome, N.Y.	15	.71	1	.51	.72
Vallejo-Napa, Calif.	44	2.87	5	3.52	1.23
Vineland-Millville-Bridgeton, N.J.	3	.40	1	1.45	3.63
Waco, Tex.	19	2.09	1	1.19	.57
Washington, D.C.-Md.-Va.	120	.68	6	.35	.51
Waterbury, Conn.	15	1.17	2	1.67	1.43
Waterloo, Iowa	8	.98	1	1.32	1.35
West Palm Beach, Fla.	48	2.24	1	.50	.22
Wheeling, W. Va.	11	.98	-	-	-
Wichita, Kans.	21	.88	1	.44	.50
Wichita Falls, Tex.	4	.51	-	-	-

SMSA, State	Number of First-Year Players	Total L.Q.	Number of Major League Players	Major L.Q.	Success L.Q.
Wilkes-Barre-Hazleton, Pa.	19	.90	-	-	-
Wilmington, Del.-N.J.-Md.	36	1.17	2	.70	.60
Wilmington, N.C.	13	1.97	1	1.63	.83
Worcester, Mass.	19	.89	2	1.02	1.15
York, Pa.	17	.84	3	1.60	1.90
Youngstown-Warren, Ohio	25	.76	1	.32	.42
243 SMSAs Total	9,517	1.11	913	1.15	1.04

APPENDIX C

AGGREGATE CLUB SIGNINGS

Baltimore Orioles

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	3	.45	1.24	-
Alaska				
Arizona	6	.91	3.35	1
Arkansas				
California	168	25.45	5.48	19
Colorado	7	1.06		-
Connecticut	12	1.82	7.61	-
Delaware	3	.45	8.11	-
Dist. of Columbia	2	.30	14.29	-
Florida	27	4.09	3.98	1
Georgia	7	1.06	2.46	-
Hawaii	3	.45	1.15	-
Idaho	2	.30	5.56	-
Illinois	22	3.33	4.06	-
Indiana	6	.91	3.47	-
Iowa	3	.45	2.75	-
Kansas	3	.45	2.75	-
Kentucky	4	.61	3.85	-
Louisiana	3	.45	1.64	-
Maine	3	.45	6.67	-
Maryland	47	7.12	21.27	1
Massachusetts	13	1.97	4.28	1
Michigan	18	2.73	4.27	1
Minnesota	5	.76	3.01	-
Mississippi	1	.15	1.01	-
Missouri	10	1.52	3.45	-
Montana	3	.45	10.00	-
Nebraska				
Nevada				
New Hampshire	4	.61	1.25	1
New Jersey	16	2.42	3.65	1
New Mexico	1	.15	2.56	1
New York	36	5.45	4.72	2
North Carolina	24	3.64	8.42	1
North Dakota	1	.15	7.14	-
Ohio	13	1.97	2.59	1
Oklahoma	6	.91	3.59	-
Oregon	7	1.06	4.70	-
Pennsylvania	38	5.76	6.37	3
Rhode Island				
South Carolina	9	1.36	6.16	1
South Dakota	1	.15	6.25	-

Baltimore Orioles (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	4	.61	2.19	2
Texas	16	2.42	2.94	2
Utah	2	.30	3.78	-
Vermont	1	.15	9.09	-
Virginia	29	4.39	10.90	5
Washington	9	1.36	3.83	-
West Virginia	9	1.36	13.24	-
Wisconsin	5	.76	3.13	-
Wyoming	1	.15	11.11	-
(U.S. Total)	614	93.03	4.89	45
Aruba				
Australia				
Bahamas	2	.30	6.67	-
Canada	1	.15	.47	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	14	2.12	2.55	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	8	1.21	26.67	2
Panama	1	.15	3.13	-
Puerto Rico	16	2.42	4.95	2
South Africa				
Taiwan				
Venezuela	4	.61	1.96	-
Virgin Islands				
(Foreign Total)	46	6.97	3.19	4
Total	660	100.0	4.72	49

Boston Red Sox

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	29	4.65	12.03	4
Alaska	1	.16	33.33	-
Arizona	1	.16	.56	-
Arkansas	1	.16	1.37	-
California	98	15.71	3.20	12
Colorado	4	.64	4.34	1
Connecticut	22	3.53	12.02	1
Delaware				
Dist. of Columbia				
Florida	36	5.77	5.31	4
Georgia	10	1.60	3.51	1
Hawaii				
Idaho	2	.32	5.56	1
Illinois	10	1.60	1.85	-
Indiana	5	.80	2.89	-
Iowa	2	.32	1.83	-
Kansas	2	.32	1.83	-
Kentucky	2	.32	1.92	-
Louisiana	14	2.24	7.65	1
Maine	7	1.12	15.56	-
Maryland	5	.80	2.26	-
Massachusetts	58	9.29	19.08	3
Michigan	36	5.77	8.53	6
Minnesota	4	.64	2.41	-
Mississippi	11	1.76	11.11	1
Missouri	6	.96	2.07	-
Montana	1	.16	3.33	-
Nebraska	5	.80	9.62	1
Nevada	2	.32	4.08	-
New Hampshire	6	.96	18.75	1
New Jersey	17	2.72	3.88	1
New Mexico				
New York	33	5.29	4.33	4
North Carolina	5	.80	1.75	-
North Dakota				
Ohio	6	.96	2.00	-
Oklahoma	9	5.39	5.39	1
Oregon	4	.64	2.68	-
Pennsylvania	26	4.17	4.36	1
Rhode Island	13	2.08	36.11	2
South Carolina	6	.96	4.11	1
South Dakota				

Boston Red Sox (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	9	1.44	4.92	1
Texas	23	3.69	4.22	1
Utah	4	.64	7.55	-
Vermont				
Virginia	10	1.60	3.76	-
Washington	4	.64	1.70	-
West Virginia				
Wisconsin	1	.16	.63	-
Wyoming	1	.16	11.11	-
(U.S. Total)	552	88.46	4.40	49
Aruba				
Australia				
Bahamas	3	.48	10.00	-
Canada	11	1.76	5.19	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	11	1.76	2.01	-
Guatemala				
Holland	1	.16	100.00	-
Japan				
Mexico				
Nicaragua				
Panama	1	.16	3.13	-
Puerto Rico	23	3.69	7.12	5
South Africa				
Taiwan				
Venezuela	18	2.88	8.82	1
Virgin Islands	4	.64	28.57	-
(Foreign Total)	72	11.54	5.00	6
Total	624	100.00	4.46	55

California Angels

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	5	.92	2.07	2
Alaska				
Arizona	7	1.29	3.91	1
Arkansas				
California	311	57.38	10.14	24
Colorado	1	.18	1.09	-
Connecticut	3	.55	1.64	1
Delaware				
Dist. of Columbia				
Florida	7	1.29	1.03	2
Georgia	3	.55	1.05	-
Hawaii				
Idaho	2	.37	5.56	-
Illinois	22	4.06	4.06	4
Indiana	3	.55	1.73	-
Iowa	2	.37	1.83	-
Kansas	3	.55	2.75	-
Kentucky				
Louisiana	10	1.85	5.46	1
Maine				
Maryland	7	1.29	3.17	1
Massachusetts	7	1.29	2.30	2
Michigan	16	2.95	3.79	4
Minnesota	4	.74	2.41	-
Mississippi	2	.37	2.02	-
Missouri	4	.74	1.38	-
Montana	1	.18	3.33	-
Nebraska	1	.18	1.92	-
Nevada	5	.92	10.20	-
New Hampshire				
New Jersey	3	.55	.68	-
New Mexico	3	.55	7.70	1
New York	7	1.29	.92	-
North Carolina	5	.92	1.75	-
North Dakota	1	.18	7.14	-
Ohio	13	2.40	2.59	1
Oklahoma	1	.18	.60	-
Oregon	4	.74	2.68	-
Pennsylvania	4	.74	.67	1
Rhode Island	1	.18	2.78	-
South Carolina	3	.55	2.05	1
South Dakota	2	.37	12.50	1

California Angels (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	4	.74	2.19	1
Texas	16	2.95	2.94	2
Utah	5	.92	9.43	1
Vermont				
Virginia	7	1.29	2.63	1
Washington	6	1.11	2.55	1
West Virginia				
Wisconsin	6	1.11	3.75	2
Wyoming				
(U.S. Total)	517	95.39	4.12	55
Aruba				
Australia				
Bahamas				
Canada	2	.37	.94	-
Canal Zone				
Columbia	4	.74	57.14	1
Costa Rica				
Cuba				
Dominican Rep.	10	1.85	1.82	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama	1	.18	3.13	-
Puerto Rico	8	1.48	2.48	-
South Africa				
Taiwan				
Venezuela				
Virgin Islands				
(Foreign Total)	25	4.61	1.73	1
Total	542	100.00	3.88	56

Chicago White Sox

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	16	3.55	6.64	3
Alaska				
Arizona	4	.89	2.23	1
Arkansas	2	.44	2.79	1
California	94	20.84	3.07	16
Colorado	7	1.55	7.61	1
Connecticut	2	.44	1.09	-
Delaware				
Dist. of Columbia				
Florida	26	5.76	3.83	3
Georgia	5	1.11	1.75	-
Hawaii				
Idaho				
Illinois	43	9.53	7.93	3
Indiana	19	4.21	10.98	3
Iowa	9	2.00	8.26	2
Kansas	2	.44	1.83	-
Kentucky	1	.22	.96	1
Louisiana	5	1.11	2.73	-
Maine	1	.22	2.22	-
Maryland	3	.67	1.36	-
Massachusetts	3	.67	.99	1
Michigan	12	2.66	2.84	2
Minnesota	1	.22	.60	-
Mississippi	6	1.33	6.06	-
Missouri	9	2.00	3.10	-
Montana	2	.44	6.67	1
Nebraska	1	.22	1.92	-
Nevada	1	.22	2.04	-
New Hampshire				
New Jersey	9	2.00	2.05	-
New Mexico				
New York	14	3.10	1.84	-
North Carolina	25	5.54	8.77	-
North Dakota	1	.22	7.14	-
Ohio	20	4.43	3.99	8
Oklahoma	3	.67	1.80	-
Oregon	1	.22	.67	1
Pennsylvania	25	5.54	4.19	1
Rhode Island	1	.22	2.78	-
South Carolina	7	1.55	4.79	-
South Dakota	1	.22	6.25	-

Chicago White Sox (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	10	2.22	5.46	1
Texas	4	.88	.73	2
Utah	2	.44	3.77	-
Vermont				
Virginia	10	2.22	3.76	-
Washington	2	.44	.85	-
West Virginia	1	.22	1.47	1
Wisconsin	22	4.88	13.75	4
Wyoming				
(U.S. Total)	432	95.79	3.44	56
Aruba				
Australia				
Bahamas	1	.22	3.33	-
Canada				
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	3	.67	.55	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	6	1.33	1.86	1
South Africa				
Taiwan				
Venezuela	9	2.00	4.41	-
Virgin Islands				
(Foreign Total)	19	4.21	1.32	1
Total	451	100.00	3.22	57

Cleveland Indians

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	11	2.01	4.56	-
Alaska				
Arizona	11	2.01	6.15	1
Arkansas				
California	74	13.53	2.41	11
Colorado	1	.18	1.09	-
Connecticut	8	1.46	4.37	-
Delaware	1	.18	2.70	-
Dist. of Columbia	1	.18	7.14	1
Florida	49	8.96	7.23	3
Georgia	19	3.47	6.67	2
Hawaii	2	.37	7.69	1
Idaho	1	.18	2.78	-
Illinois	18	3.29	3.32	1
Indiana	12	2.19	6.94	-
Iowa	3	.55	2.75	-
Kansas	3	.55	2.75	-
Kentucky	3	.55	2.88	-
Louisiana	9	1.65	4.92	1
Maine				
Maryland	8	1.46	3.62	-
Massachusetts	15	2.74	4.93	-
Michigan	18	3.29	4.27	2
Minnesota	1	.18	.60	-
Mississippi	6	1.10	6.06	-
Missouri	10	1.80	3.45	-
Montana				
Nebraska				
Nevada	2	.37	4.08	-
New Hampshire	1	.18	3.13	-
New Jersey	8	1.46	1.83	2
New Mexico	3	.55	7.69	-
New York	27	4.94	3.54	2
North Carolina	14	2.56	4.91	2
North Dakota				
Ohio	70	12.80	13.97	3
Oklahoma	9	1.65	5.39	-
Oregon	3	.55	2.01	-
Pennsylvania	14	2.56	2.35	-
Rhode Island				
South Carolina	8	1.46	5.48	1
South Dakota				

Cleveland Indians (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	6	1.10	3.28	-
Texas	28	5.12	5.14	5
Utah	4	.73	7.55	1
Vermont				
Virginia	12	2.19	4.51	-
Washington	12	2.19	5.11	3
West Virginia	4	.73	5.88	-
Wisconsin	5	.91	3.13	1
Wyoming				
(U.S. Total)	515	94.15	4.11	43
Aruba				
Australia				
Bahamas	2	.36	6.67	-
Canada				
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	19	3.47	3.47	2
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama	1	.18	3.13	-
Puerto Rico	3	.55	.93	-
South Africa				
Taiwan				
Venezuela	7	1.28	3.43	-
Virgin Islands				
(Foreign Total)	32	5.85	2.22	2
Total	547	100.00	3.91	45

Detroit Tigers

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	4	.56	1.66	-
Alaska				
Arizona	3	.42	1.68	1
Arkansas	4	.56	5.48	-
California	99	13.79	3.23	17
Colorado	1	.14	1.09	-
Connecticut	4	.56	2.19	-
Delaware	1	.14	2.70	-
Dist. of Columbia				
Florida	20	2.79	2.95	-
Georgia	11	1.53	3.86	1
Hawaii				
Idaho				
Illinois	8	1.11	1.48	1
Indiana	11	1.53	6.36	-
Iowa	1	.28	.92	-
Kansas	7	.97	6.42	-
Kentucky	3	.42	2.88	-
Louisiana	1	.14	.55	-
Maine				
Maryland	5	.70	2.26	1
Massachusetts	10	1.39	3.29	1
Michigan	134	18.66	31.75	11
Minnesota	3	.42	1.81	1
Mississippi				
Missouri	19	2.65	6.55	1
Montana	1	.14	3.33	-
Nebraska	2	.28	3.85	-
Nevada				
New Hampshire	4	.56	12.50	-
New Jersey	48	6.69	10.96	6
New Mexico				
New York	96	13.37	12.60	5
North Carolina	8	1.11	2.81	-
North Dakota				
Ohio	60	8.36	11.98	8
Oklahoma	3	.42	1.80	-
Oregon				
Pennsylvania	55	7.66	9.21	1
Rhode Island	3	.42	8.33	-
South Carolina	4	.56	2.74	1
South Dakota				

Detroit Tigers (Continued

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	6	.84	3.28	-
Texas	11	1.53	2.02	1
Utah	2	.28	3.77	-
Vermont				
Virginia	11	1.53	4.14	2
Washington	1	.14	.43	1
West Virginia	1	.14	1.47	-
Wisconsin	4	.56	2.50	1
Wyoming				
(U.S. Total)	672	93.59	5.36	61
Aruba				
Australia				
Bahamas				
Canada	33	4.60	15.57	2
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	1	.14	.18	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	11	1.53	3.41	-
South Africa				
Taiwan				
Venezuela	1	.14	.49	-
Virgin Islands				
(Foreign Total)	46	6.41	3.19	2
Total	718	100.00	5.13	63

Kansas City Royals

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	4	.66	1.66	1
Alaska				
Arizona	6	.99	3.35	-
Arkansas	4	.66	5.48	-
California	183	30.05	5.97	16
Colorado	6	.99	6.52	1
Connecticut	1	.16	.55	-
Delaware	1	.16	2.70	-
Dist. of Columbia				
Florida	27	4.43	3.98	1
Georgia	6	.99	2.11	-
Hawaii	4	.66	15.38	-
Idaho	2	.33	5.56	-
Illinois	28	4.60	5.17	4
Indiana	11	1.81	6.36	2
Iowa	3	.49	2.75	-
Kansas	12	1.97	11.01	-
Kentucky	5	.82	4.81	-
Louisiana	12	1.97	6.56	2
Maine	1	.16	2.22	-
Maryland	3	.49	1.36	-
Massachusetts	8	1.31	2.63	-
Michigan	15	2.46	3.55	-
Minnesota	5	.82	3.01	-
Mississippi	7	1.15	7.07	-
Missouri	25	3.94	8.62	2
Montana	3	.49	10.0	-
Nebraska	4	.66	7.69	-
Nevada	2	.33	4.08	-
New Hampshire	2	.33	6.25	1
New Jersey	14	2.30	3.20	1
New Mexico	3	.49	7.69	-
New York	20	3.28	2.62	2
North Carolina	16	2.63	5.61	1
North Dakota	1	.16	7.14	-
Ohio	10	1.64	2.00	-
Oklahoma	3	.49	2.40	2
Oregon	6	.99	4.03	-
Pennsylvania	17	2.79	2.85	1
Rhode Island				
South Carolina	4	.66	2.74	1
South Dakota				

Kansas City Royals (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	7	1.15	3.83	-
Texas	20	-	-	-
Utah	1	.16	1.89	-
Vermont	1	.16	9.09	-
Virginia	34	5.58	12.78	1
Washington	9	1.48	3.83	-
West Virginia	4	.66	5.88	-
Wisconsin	8	1.31	5.00	1
Wyoming				
(U.S. Total)	568	93.27	4.53	40
Aruba				
Australia	1	.16	20.00	-
Bahamas				
Canada	4	.66	1.89	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	15	2.46	2.74	1
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	12	1.97	3.72	-
South Africa				
Taiwan				
Venezuela	9	1.48	4.41	-
Virgin Islands				
(Foreign Total)	41	6.73	2.85	1
Total	608	100.00	4.35	41

Milwaukee Brewers

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	6	1.86	2.49	1
Alaska				
Arizona	7	2.17	3.91	-
Arkansas				
California	55	17.08	1.79	9
Colorado	2	.62	2.17	-
Connecticut	2	.62	3.23	-
Delaware	2	.62	5.41	-
Dist. of Columbia	1	.31	7.14	-
Florida	14	4.35	2.06	1
Georgia	5	1.55	1.75	-
Hawaii	1	.31	3.85	1
Idaho				
Illinois	4	1.24	.74	-
Indiana	1	.31	.58	-
Iowa	2	.62	1.83	-
Kansas				
Kentucky	1	.31	.96	-
Louisiana				
Maine	2	.62	4.44	-
Maryland	5	1.55	2.26	1
Massachusetts	18	5.59	5.92	1
Michigan	7	2.17	1.66	1
Minnesota	2	.62	1.20	1
Mississippi	2	.62	2.02	-
Missouri	2	.62	.69	1
Montana				
Nebraska	1	.31	1.92	-
Nevada	1	.31	2.04	1
New Hampshire				
New Jersey	6	1.86	1.37	-
New Mexico	1	.31	2.56	-
New York	33	10.25	4.33	2
North Carolina	4	1.24	1.40	1
North Dakota	1	.31	7.14	-
Ohio	4	1.24	.80	-
Oklahoma	9	2.80	4.79	2
Oregon	3	.93	2.01	-
Pennsylvania	6	1.86	1.01	1
Rhode Island				
South Carolina	10	3.11	6.85	1
South Dakota				

Milwaukee Brewers (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	2	.62	1.09	1
Texas	17	5.28	3.12	-
Utah				
Vermont				
Virginia	5	1.55	1.88	-
Washington	11	3.42	4.68	1
West Virginia	1	.31	1.47	-
Wisconsin	9	2.80	5.63	3
Wyoming				
(U.S. Total)	264	81.99	2.10	30
Aruba	1	.31	33.33	-
Australia				
Bahamas				
Canada	4	1.24	1.89	-
Canal Zone				
Columbia	1	.31	14.29	-
Costa Rica				
Cuba				
Dominican Rep.	16	4.97	2.92	2
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	35	10.87	10.84	6
South Africa				
Taiwan				
Venezuela	1	.31	.49	-
Virgin Islands				
(Foreign Total)	58	18.01	4.02	8
Total	322	100.00	2.30	38

Minnesota Twins

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	6	.82	2.49	-
Alaska				
Arizona	7	.96	3.91	-
Arkansas	1	.14	-	-
California	242	33.15	1.37	26
Colorado	9	1.23	9.78	-
Connecticut	5	.68	2.73	-
Delaware	1	.14	2.70	-
Dist. of Columbia				
Florida	36	4.93	5.31	5
Georgia	13	1.78	4.56	-
Hawaii				
Idaho				
Illinois	32	4.38	5.90	1
Indiana	6	.82	3.47	1
Iowa	14	1.91	12.84	1
Kansas	4	.55	3.67	-
Kentucky	6	.82	5.77	-
Louisiana	7	.96	3.83	-
Maine	2	.28	4.44	-
Maryland	16	2.19	7.24	1
Massachusetts	6	.82	1.97	-
Michigan	11	1.51	2.61	1
Minnesota	78	10.68	46.99	6
Mississippi	1	.14	1.01	1
Missouri	15	2.05	5.17	1
Montana	2	.28	6.67	-
Nebraska	6	.82	11.54	-
Nevada	3	.41	6.12	-
New Hampshire	3	.41	9.38	-
New Jersey	24	3.29	5.48	3
New Mexico	1	.14	2.56	-
New York	28	3.84	3.67	1
North Carolina	16	2.19	5.61	-
North Dakota	1	.14	7.14	-
Ohio	7	.96	1.40	-
Oklahoma	4	.55	2.40	2
Oregon	7	.96	4.70	-
Pennsylvania	16	2.19	2.68	2
Rhode Island	4	.55	11.11	-
South Carolina	4	.55	2.74	-
South Dakota	4	.55	25.00	-

Minnesota Twins (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	9	2.19	4.92	-
Texas	7	.96	1.28	-
Utah	2	.28	3.77	-
Vermont				
Virginia	15	2.05	5.64	-
Washington	5	.68	2.13	-
West Virginia	2	.28	2.94	-
Wisconsin	31	4.25	19.38	-
Wyoming				
(U.S. Total)	721	98.77	5.79	53
Aruba				
Australia				
Bahamas	1	.14	3.33	-
Canada	5	.68	2.36	1
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.				
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico				
South Africa	1	.14	100.00	-
Taiwan				
Venezuela	2	.28	.98	-
Virgin Islands				
(Foreign Total)	9	1.23	.62	1
Total	730	100.00	5.22	54

New York Yankees

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	3	.51	1.24	-
Alaska				
Arizona	4	.68	2.23	1
Arkansas	5	.85	6.85	-
California	81	13.75	2.64	8
Colorado	5	.85	5.43	1
Connecticut	12	2.04	6.56	2
Delaware	2	.34	5.41	-
Dist. of Columbia	1	.17	7.14	-
Florida	26	4.41	3.83	2
Georgia	9	1.53	3.16	1
Hawaii				
Idaho	6	1.02	16.67	-
Illinois	20	3.40	3.69	3
Indiana	4	.68	2.31	-
Iowa	15	2.55	13.76	1
Kansas	11	1.87	10.09	-
Kentucky	5	.85	4.81	1
Louisiana	9	1.53	4.92	2
Maine	7	1.19	15.56	2
Maryland	4	.68	1.81	-
Massachusetts	14	2.38	4.61	1
Michigan	6	1.02	1.42	-
Minnesota	7	1.19	4.22	-
Mississippi	7	1.19	7.07	1
Missouri	18	3.06	6.21	-
Montana				
Nebraska	1	.17	1.92	-
Nevada				
New Hampshire	1	.17	3.13	-
New Jersey	35	5.94	7.99	-
New Mexico	1	.17	2.56	-
New York	53	9.00	6.96	5
North Carolina	9	1.53	3.16	1
North Dakota				
Ohio	17	2.89	3.39	2
Oklahoma	9	1.53	5.39	1
Oregon	16	2.72	10.74	2
Pennsylvania	26	4.41	4.36	2
Rhode Island	2	.34	5.56	-
South Carolina	6	1.02	4.11	-
South Dakota	1	.17	6.25	-

New York Yankees (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	8	1.36	4.37	-
Texas	17	2.89	3.12	3
Utah	2	.34	3.77	1
Vermont				
Virginia	8	1.36	3.01	1
Washington	35	5.94	14.89	3
West Virginia	2	.34	2.94	-
Wisconsin	4	.68	2.50	-
Wyoming				
(U.S. Total)	535	90.83	4.26	46
Aruba				
Australia				
Bahamas				
Canada	12	2.04	5.66	-
Canal Zone	1	.17	5.88	-
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	26	4.41	4.74	5
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	11	1.87	3.41	1
South Africa				
Taiwan				
Venezuela	3	.51	1.47	-
Virgin Islands	1	.17	7.14	-
(Foreign Total)	54	9.17	3.75	6
Total	589	100.00	4.21	52

Oakland Athletics

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	10	2.10	4.15	-
Alaska				
Arizona	7	1.47	3.91	1
Arkansas	4	.84	5.48	1
California	183	38.45	5.84	24
Colorado	1	.21	1.09	-
Connecticut	8	1.71	4.37	-
Delaware	2	.42	5.41	-
Dist. of Columbia				
Florida	14	2.94	2.06	-
Georgia	6	1.26	2.11	-
Hawaii	1	.21	3.85	-
Idaho	1	.21	2.78	-
Illinois	12	2.52	2.03	3
Indiana	2	.42	1.16	-
Iowa	3	.63	2.75	-
Kansas	2	.42	1.83	-
Kentucky	2	.42	1.92	-
Louisiana	3	.63	1.64	1
Maine	2	.42	4.44	-
Maryland	3	.63	1.36	-
Massachusetts	15	3.15	4.93	1
Michigan	8	1.68	1.90	1
Minnesota	2	.42	1.20	-
Mississippi	3	.63	3.03	-
Missouri	16	3.36	5.52	-
Montana	1	.21	3.33	-
Nebraska	3	.63	5.77	-
Nevada	4	.84	8.16	-
New Hampshire	1	.21	3.13	-
New Jersey	16	3.36	3.65	1
New Mexico	1	.21	2.56	-
New York	21	4.41	2.62	2
North Carolina	9	1.89	3.16	1
North Dakota	1	.21	7.14	-
Ohio	10	2.10	2.00	1
Oklahoma	5	1.05	2.99	-
Oregon	2	.42	1.34	-
Pennsylvania	19	3.99	3.02	2
Rhode Island	1	.21	2.78	-
South Carolina	2	.42	1.37	-
South Dakota	2	.42	12.50	-

Oakland Athletics (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	4	.84	2.19	1
Texas	5	1.05	.92	-
Utah				
Vermont	1	.21	9.09	-
Virginia	5	1.05	1.88	-
Washington	17	3.57	6.88	2
West Virginia	1	.21	1.47	-
Wisconsin	1	.21	.63	-
Wyoming				
(U.S. Total)	443	93.07	3.47	42
Aruba				
Australia				
Bahamas	1	.21	3.33	-
Canada	8	1.68	3.77	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.				
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	1	.21	3.33	-
Panama				
Puerto Rico	15	3.15	4.64	-
South Africa				
Taiwan				
Venezuela	8	1.68	3.92	1
Virgin Islands				
(Foreign Total)	33	6.93	2.29	1
Total	476	100.0	3.35	43

Texas Rangers

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	1	.23	.41	1
Alaska				
Arizona	6	1.37	3.35	-
Arkansas				
California	46	10.53	1.50	11
Colorado	1	.23	1.09	-
Connecticut	4	.92	2.19	-
Delaware	1	.23	2.70	1
Dist. of Columbia	4	.92	28.57	-
Florida	37	8.47	5.46	4
Georgia	3	.69	1.05	2
Hawaii				
Idaho				
Illinois	39	8.92	7.20	5
Indiana	5	1.14	2.89	-
Iowa	3	.69	2.75	2
Kansas	6	1.37	5.50	-
Kentucky	2	.46	1.92	1
Louisiana	14	3.21	7.65	1
Maine	1	.23	2.22	1
Maryland	29	6.64	13.12	1
Massachusetts	7	1.60	2.30	2
Michigan	11	2.52	2.61	5
Minnesota	7	1.60	4.22	1
Mississippi	3	.69	3.03	2
Missouri	2	.46	.69	-
Montana	1	.23	3.33	-
Nebraska	2	.46	3.85	1
Nevada	2	.46	4.08	-
New Hampshire				
New Jersey	11	2.52	2.51	1
New Mexico	1	.23	2.56	-
New York	20	4.58	2.62	1
North Carolina	29	6.64	10.18	2
North Dakota	1	.23	7.14	-
Ohio	23	5.26	4.59	-
Oklahoma	6	1.37	3.59	1
Oregon	2	.46	1.34	-
Pennsylvania	16	3.66	2.68	2
Rhode Island				
South Carolina	11	2.52	7.53	-
South Dakota				

Texas Rangers (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	2	.46	1.09	-
Texas	34	7.78	6.24	8
Utah				
Vermont	1	.23	9.09	-
Virginia	18	4.12	6.77	2
Washington				
West Virginia	5	1.14	7.35	-
Wisconsin	17	3.89	10.63	3
Wyoming				
(U.S. Total)	434	99.31	3.46	61
Aruba				
Australia				
Bahamas				
Canada				
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.				
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	1	.23	.31	-
South Africa				
Taiwan				
Venezuela	2	.46	.98	-
Virgin Islands				
(Foreign Total)	3	.69	.21	-
Total	437	100.00	3.12	61

Seattle Mariners

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama				
Alaska				
Arizona	2	4.26	1.12	-
Arkansas				
California	9	19.15	.29	-
Colorado				
Connecticut	1	2.13	.55	-
Delaware				
Dist. of Columbia				
Florida	8	17.02	1.18	-
Georgia				
Hawaii				
Idaho				
Illinois	1	2.13	.18	-
Indiana	1	2.13	.58	-
Iowa				
Kansas				
Kentucky				
Louisiana	2	4.26	1.09	-
Maine				
Maryland	1	2.13	.45	-
Massachusetts	1	2.13	.33	-
Michigan	1	2.13	.24	-
Minnesota				
Mississippi				
Missouri				
Montana				
Nebraska				
Nevada				
New Hampshire				
New Jersey	1	2.13	.23	-
New Mexico				
New York	1	2.13	.13	-
North Carolina	1	2.13	.35	-
North Dakota				
Ohio				
Oklahoma				
Oregon	1	2.13	.67	-
Pennsylvania				
Rhode Island				
South Carolina				
South Dakota				

Seattle Mariners (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming	1 9 	2.13 19.15 	.18 3.83 	-
(U.S. Total)	41	87.23	.33	-
Aruba Australia Bahamas Canada Canal Zone Columbia Costa Rica Cuba Dominican Rep. Guatemala Holland Japan Mexico Nicaragua Panama Puerto Rico South Africa Taiwan Venezuela Virgin Islands	 1 2 1 2 	 2.13 4.26 2.13 4.26 	 .47 .36 .31 .98 	 - - - -
(Foreign Total)	6	12.77	.42	-
Total	47	100.00	.34	-

Toronto Blue Jays

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	1	3.70	.41	-
Alaska				
Arizona				
Arkansas				
California	6	22.22	.20	-
Colorado				
Connecticut				
Delaware				
Dist. of Columbia				
Florida				
Georgia				
Hawaii				
Idaho				
Illinois	2	7.41	.37	-
Indiana				
Iowa				
Kansas				
Kentucky				
Louisiana				
Maine				
Maryland				
Massachusetts				
Michigan				
Minnesota				
Mississippi				
Missouri				
Montana				
Nebraska				
Nevada				
New Hampshire				
New Jersey				
New Mexico				
New York				
North Carolina				
North Dakota				
Ohio	1	3.70	.20	-
Oklahoma				
Oregon	2	7.41	1.34	-
Pennsylvania				
Rhode Island				
South Carolina				
South Dakota				

Toronto Blue Jays (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming	1	3.70	.18	-
(U.S. Total)	13	48.15	.10	-
Aruba Australia Bahamas Canada Canal Zone Columbia Costa Rica Cuba	7	25.93	3.30	-
Dominican Rep. Guatemala Holland Japan Mexico Nicaragua Panama Puerto Rico South Africa Taiwan Venezuela Virgin Islands	7	25.93	1.28	-
(Foreign Total)	14	51.85	.98	-
Total	27	100.00	.19	-

Atlanta Braves

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	27	4.88	11.20	-
Alaska				
Arizona				
Arkansas	3	.54	4.11	1
California	81	14.65	2.64	12
Colorado				
Connecticut	4	.72	2.19	-
Delaware				
Dist. of Columbia	1	.18	7.14	-
Florida	23	4.16	3.39	3
Georgia	44	7.96	15.44	4
Hawaii				
Idaho	1	.18	2.78	-
Illinois	20	3.62	3.69	2
Indiana	4	.72	2.31	1
Iowa	2	.36	1.83	-
Kansas	3	.54	2.75	1
Kentucky	6	1.08	5.77	1
Louisiana	19	3.44	10.38	3
Maine	3	.54	6.67	-
Maryland	4	.72	1.81	-
Massachusetts	4	.72	1.32	-
Michigan	4	.72	.95	-
Minnesota	6	1.08	3.61	-
Mississippi	5	.90	5.05	1
Missouri	10	1.81	3.45	2
Montana				
Nebraska	5	.90	9.62	2
Nevada	1	.18	2.04	-
New Hampshire	1	.18	3.13	-
New Jersey	35	6.33	7.99	2
New Mexico				
New York	27	4.88	3.54	-
North Carolina	13	2.35	4.56	1
North Dakota				
Ohio	13	2.35	2.59	1
Oklahoma	8	1.45	4.79	2
Oregon	2	.36	1.34	1
Pennsylvania	13	2.35	2.18	-
Rhode Island	1	.18	2.78	-
South Carolina	10	1.81	6.85	-
South Dakota				

Atlanta Braves (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	15	2.71	8.20	1
Texas	40	7.23	7.34	9
Utah	3	.54	5.66	1
Vermont				
Virginia	8	1.45	3.01	1
Washington	7	1.27	2.98	1
West Virginia				
Wisconsin	2	.36	1.25	-
Wyoming				
(U.S. Total)	477	86.44	3.81	53
Aruba				
Australia				
Bahamas	2	.36	6.67	-
Canada	2	.36	.94	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	30	5.42	5.47	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	3	.54	10.0	-
Panama				
Puerto Rico	18	3.25	5.57	-
South Africa				
Taiwan				
Venezuela	19	3.44	9.31	2
Virgin Islands	1	.18	7.14	-
(Foreign Total)	75	13.56	5.20	2
Total	552	100.00	3.95	55

Chicago Cubs

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	12	2.33	4.98	4
Alaska				
Arizona	14	2.72	7.82	1
Arkansas	2	.39	2.74	-
California	83	16.15	2.71	16
Colorado	2	.39	2.17	-
Connecticut	5	.97	2.73	-
Delaware				
Dist. of Columbia	1	.19	7.14	-
Florida	27	5.25	3.98	1
Georgia	13	2.53	4.56	-
Hawaii				
Idaho	3	.58	8.33	1
Illinois	48	9.34	8.86	5
Indiana	9	1.75	5.20	-
Iowa	6	1.17	5.50	1
Kansas	3	.58	2.79	-
Kentucky	3	.58	2.88	-
Louisiana	10	1.95	5.46	1
Maine	4	.78	8.89	-
Maryland	8	1.56	3.62	2
Massachusetts	12	2.33	3.95	2
Michigan	5	.97	1.18	-
Minnesota	1	.19	.60	-
Mississippi	2	.39	2.02	-
Missouri	15	2.92	5.17	3
Montana				
Nebraska				
Nevada	2	.39	4.08	-
New Hampshire	1	.19	3.13	-
New Jersey	30	5.84	6.85	-
New Mexico	2	.39	5.13	-
New York	21	4.09	2.76	1
North Carolina	10	1.95	3.51	2
North Dakota				
Ohio	12	2.33	2.40	2
Oklahoma	10	1.95	5.99	2
Oregon	10	1.95	6.71	-
Pennsylvania	34	6.61	5.70	4
Rhode Island	2	.39	5.56	-
South Carolina	2	.39	1.37	1
South Dakota	1	.19	6.25	-

Chicago Cubs (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	5	.97	2.73	-
Texas	27	5.25	4.95	4
Utah				
Vermont				
Virginia	5	.97	1.88	-
Washington	12	2.33	5.11	2
West Virginia	8	1.56	11.76	-
Wisconsin	4	.78	2.50	-
Wyoming				
(U.S. Total)	487	94.75	3.88	55
Aruba				
Australia				
Bahamas				
Canada	1	.19	.47	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.				
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama	1	.19	3.13	-
Puerto Rico	16	3.11	4.95	3
South Africa				
Taiwan				
Venezuela	9	1.75	4.41	-
Virgin Islands				
(Foreign Total)	27	5.25	1.87	3
Total	514	100.00	3.68	58

Cincinnati Reds

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	17	2.73	7.05	-
Alaska				
Arizona	6	.96	3.35	1
Arkansas	1	.16	.56	-
California	60	9.65	1.96	8
Colorado	9	1.45	9.78	-
Connecticut	11	1.77	6.01	-
Delaware				
Dist. of Columbia				
Florida	52	8.36	7.67	3
Georgia	8	1.29	2.81	2
Hawaii	1	.16	3.85	-
Idaho				
Illinois	19	3.05	3.51	-
Indiana	17	2.73	9.83	2
Iowa	7	1.13	6.42	-
Kansas	5	.80	4.59	-
Kentucky	13	2.09	12.50	2
Louisiana	10	1.61	5.46	-
Maine	1	.16	2.22	-
Maryland	7	1.13	3.17	-
Massachusetts	5	.80	1.64	1
Michigan	10	1.61	2.37	2
Minnesota	7	1.13	4.22	-
Mississippi	6	.96	6.06	-
Missouri	21	3.38	7.24	1
Montana	1	.16	3.33	-
Nebraska	8	1.29	15.38	1
Nevada	3	.48	6.12	-
New Hampshire	1	16	3.13	-
New Jersey	17	2.73	3.88	1
New Mexico	6	.96	15.38	-
New York	28	4.50	3.67	-
North Carolina	19	3.05	6.67	1
North Dakota	3	.48	21.43	-
Ohio	40	6.43	7.98	3
Oklahoma	8	1.29	4.79	2
Oregon	3	.48	2.01	-
Pennsylvania	37	5.95	6.20	3
Rhode Island				
South Carolina	5	.80	3.42	1
South Dakota	3	.48	18.75	-

Cincinnati Reds (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	7	1.13	3.83	1
Texas	52	8.36	9.54	3
Utah	8	1.29	15.09	1
Vermont				
Virginia	8	1.29	3.01	-
Washington	4	.64	1.70	-
West Virginia	6	.96	8.82	-
Wisconsin	8	1.29	5.00	1
Wyoming	1	.16	11.11	-
(U.S. Total)	570	91.64	4.54	40
Aruba				
Australia	3	.48	10.00	-
Bahamas	1	.16	3.33	-
Canada	2	.32	.94	-
Canal Zone	1	.16	5.88	-
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	21	3.38	3.83	4
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama	2	.32	6.25	-
Puerto Rico	5	.80	1.55	-
South Africa				
Taiwan	3	.48	75.00	-
Venezuela	14	2.25	6.86	2
Virgin Islands				
(Foreign Total)	52	8.36	3.61	6
Total	622	100.00	4.45	46

Houston Astros

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	8	1.57	3.32	1
Alaska				
Arizona	17	3.33	9.50	4
Arkansas	6	1.18	8.22	-
California	85	16.67	2.77	12
Colorado	3	.59	3.26	-
Connecticut	1	.20	.55	-
Delaware	6	1.18	16.21	-
Dist. of Columbia				
Florida	29	5.69	4.28	4
Georgia	3	.59	1.05	-
Hawaii				
Idaho	2	.39	5.56	-
Illinois	11	2.16	2.03	1
Indiana	4	.78	2.31	-
Iowa	3	.59	2.75	-
Kansas	1	.20	.92	-
Kentucky	6	1.18	5.77	-
Louisiana	9	1.76	4.92	1
Maine	2	.39	4.44	-
Maryland	9	1.76	4.07	-
Massachusetts	10	1.96	3.29	1
Michigan	12	2.35	2.84	3
Minnesota	1	.20	.60	1
Mississippi	2	.39	2.02	1
Missouri	6	1.18	2.07	-
Montana				
Nebraska	2	.39	3.85	-
Nevada	1	.20	2.04	-
New Hampshire	1	.20	3.13	-
New Jersey	15	2.94	3.42	-
New Mexico	6	1.18	15.38	-
New York	11	2.16	1.44	1
North Carolina	6	1.18	2.11	-
North Dakota				
Ohio	6	1.18	1.20	2
Oklahoma	12	2.35	7.19	-
Oregon	6	.98	3.36	2
Pennsylvania	19	3.73	3.18	2
Rhode Island				
South Carolina	3	.59	2.05	-
South Dakota	1	.20	6.25	-

Houston Astros (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	8	1.57	4.37	-
Texas	50	9.80	9.17	2
Utah	2	.39	3.77	-
Vermont	2	.39	18.18	-
Virginia	9	1.76	3.38	-
Washington	7	1.37	2.98	1
West Virginia	1	.20	1.47	-
Wisconsin				
Wyoming				
(U.S. Total)	403	79.17	3.22	39
Aruba	1	.20	33.33	-
Australia				
Bahamas	6	1.18	20.00	1
Canada	9	1.76	4.25	1
Canal Zone	1	.20	5.88	-
Columbia				
Costa Rica				
Cuba	1	.20	100.00	-
Dominican Rep.	53	9.67	9.67	4
Guatemala				
Holland				
Japan				
Mexico	1	.20	100.00	-
Nicaragua	1	.20	3.33	-
Panama	3	.59	9.38	-
Puerto Rico	11	2.16	3.41	-
South Africa				
Taiwan				
Venezuela	19	3.73	9.31	1
Virgin Islands				
(Foreign Total)	106	20.83	7.36	7
Total	509	100.00	3.65	46

Los Angeles Dodgers

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	7	1.24	2.90	1
Alaska	1	.18	33.33	-
Arizona	12	2.12	6.70	-
Arkansas	5	.88	6.85	-
California	177	31.33	5.78	23
Colorado	2	.35	2.17	-
Connecticut	5	.88	2.73	1
Delaware				
Dist. of Columbia				
Florida	32	5.66	4.72	5
Georgia	16	2.83	5.61	2
Hawaii	1	.18	3.85	-
Idaho				
Illinois	22	3.89	4.06	-
Indiana	6	1.06	3.47	1
Iowa	1	.18	.92	-
Kansas	13	2.30	11.93	3
Kentucky	3	.53	2.89	-
Louisiana	9	1.59	4.92	-
Maine				
Maryland	3	.53	1.36	-
Massachusetts	4	.71	1.32	-
Michigan	10	1.77	2.37	4
Minnesota	3	.53	1.81	1
Mississippi	2	.35	2.02	-
Missouri	10	1.77	3.45	2
Montana				
Nebraska	1	.18	1.92	-
Nevada	6	1.06	12.24	1
New Hampshire	1	.18	3.13	-
New Jersey	13	2.30	2.97	
New Mexico	5	.88	12.82	-
New York	33	5.84	4.33	2
North Carolina	6	1.06	2.11	-
North Dakota	1	18	7.14	-
Ohio	8	1.42	1.60	1
Oklahoma	15	2.65	8.98	3
Oregon	3	.53	2.01	-
Pennsylvania	23	4.07	3.85	2
Rhode Island	1	.18	2.78	-
South Carolina	4	.71	2.74	-
South Dakota				

Los Angeles Dodgers (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	3	.53	1.64	-
Texas	20	3.54	3.67	3
Utah	3	.53	5.66	-
Vermont	1	.18	9.09	-
Virginia	5	.88	1.88	-
Washington	7	1.24	2.98	1
West Virginia	1	.18	1.47	-
Wisconsin	4	.71	2.50	-
Wyoming				
(U.S. Total)	508	89.91	4.05	56
Aruba				
Australia				
Bahamas	1	.18	3.33	-
Canada	1	.18	.47	-
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	32	5.66	5.84	2
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	11	1.95	3.41	3
South Africa				
Taiwan				
Venezuela	11	1.95	5.39	-
Virgin Islands	1	.18	7.14	1
(Foreign Total)	57	10.09	3.96	6
Total	565	100.00	4.04	62

Montreal Expos

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	6	1.41	2.49	-
Alaska				
Arizona	3	.70	1.68	-
Arkansas	3	.70	4.11	1
California	68	15.96	2.22	11
Colorado	1	.23	1.09	-
Connecticut	6	1.41	3.28	-
Delaware	1	.23	2.70	-
Dist. of Columbia				
Florida	19	4.46	2.80	4
Georgia	12	2.82	4.21	-
Hawaii	1	.23	3.85	-
Idaho				
Illinois	15	3.52	2.77	3
Indiana				
Iowa	8	1.88	7.34	-
Kansas	3	.70	2.75	-
Kentucky	7	1.64	6.73	-
Louisiana	1	.23	.55	-
Maine				
Maryland	4	.94	1.81	-
Massachusetts	4	.94	1.32	-
Michigan	16	3.76	3.79	1
Minnesota	5	1.17	3.01	1
Mississippi	5	1.17	5.05	-
Missouri	5	1.17	1.72	1
Montana				
Nebraska	3	.70	5.77	1
Nevada				
New Hampshire	1	.23	3.13	-
New Jersey	19	4.46	4.34	-
New Mexico	1	.23	2.56	-
New York	21	4.93	2.76	1
North Carolina	3	.70	1.06	1
North Dakota				
Ohio	33	7.75	6.59	1
Oklahoma	7	1.64	4.19	-
Oregon	5	1.17	3.36	-
Pennsylvania	12	2.82	2.01	2
Rhode Island				
South Carolina				
South Dakota				

Montreal Expos (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	5	1.17	2.73	-
Texas	33	7.75	6.06	4
Utah				
Vermont	2	.47	18.18	--
Virginia	7	1.64	2.63	-
Washington	4	.94	1.70	1
West Virginia	1	.23	1.47	-
Wisconsin	2	.47	1.25	1
Wyoming				
(U.S. Total)	353	82.86	2.81	34
Aruba				
Australia				
Bahamas	1	.23	3.33	-
Canada	32	7.51	15.09	2
Canal Zone	1	.23	5.89	-
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	9	2.11	1.64	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	25	5.87	7.74	2
South Africa				
Taiwan				
Venezuela	4	.94	1.96	-
Virgin Islands	1	.23	7.14	-
(Foreign Total)	73	17.14	5.07	4
Total	426	100.00	3.05	38

New York Mets

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	7	1.01	2.90	2
Alaska				
Arizona	14	2.01	7.82	4
Arkansas	2	.29	2.74	-
California	124	4.08	4.08	13
Colorado	4	.58	4.35	-
Connecticut	17	2.45	9.29	1
Delaware	1	.14	2.70	-
Dist. of Columbia				
Florida	32	4.60	4.72	1
Georgia	29	4.17	10.18	2
Hawaii				
Idaho				
Illinois	21	3.02	3.87	2
Indiana	11	1.58	6.36	-
Iowa	3	.43	2.75	2
Kansas	11	1.58	10.09	2
Kentucky	5	.72	4.81	0
Louisiana	8	1.15	4.37	3
Maine				
Maryland	10	1.44	4.52	-
Massachusetts	9	1.29	2.96	-
Michigan	8	1.15	1.90	-
Minnesota	6	.86	3.61	-
Mississippi	5	.72	5.05	1
Missouri	15	2.16	5.17	1
Montana	2	.29	6.67	1
Nebraska	2	.29	3.85	-
Nevada	1	.14	2.04	-
New Hampshire				
New Jersey	10	1.44	2.28	1
New Mexico	1	.14	2.56	-
New York	65	9.35	8.53	8
North Carolina	18	2.59	6.32	2
North Dakota				
Ohio	26	3.74	5.19	-
Oklahoma	8	1.15	4.79	3
Oregon	7	1.01	4.70	1
Pennsylvania	32	4.60	5.36	2
Rhode Island	2	.29	5.56	-
South Carolina	11	1.58	7.53	1
South Dakota				

New York Mets (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	8	1.15	4.37	-
Texas	30	4.32	5.50	3
Utah	5	.72	9.43	1
Vermont				
Virginia	13	1.87	4.89	1
Washington	9	1.29	3.83	-
West Virginia	6	.86	8.82	-
Wisconsin	7	1.01	4.38	-
Wyoming	1	.14	11.11	-
(U.S. Total)	608	87.63	4.85	58
Aruba	1	.14	33.33	-
Australia				
Bahamas	3	.43	10.00	-
Canada	10	1.44	4.72	1
Canal Zone	1	.14	5.88	-
Columbia				
Costa Rica	1	.14	100.00	-
Cuba				
Dominican Rep.	33	4.75	6.02	1
Guatemala	1	.14	100.00	-
Holland				
Japan				
Mexico				
Nicaragua				
Panama	1	.14	3.13	1
Puerto Rico	25	3.60	7.74	5
South Africa				
Taiwan				
Venezuela	10	1.44	4.90	-
Virgin Islands				
(Foreign Total)	86	12.37	5.97	8
Total	694	100.00	4.97	66

Philadelphia Phillies

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	1	.16	.41	-
Alaska	1	.16	33.33	-
Arizona	5	.78	2.79	-
Arkansas	2	.31	2.74	-
California	131	20.47	4.27	17
Colorado	3	.47	3.26	2
Connecticut	15	2.34	8.20	2
Delaware	7	1.09	18.92	-
Dist. of Columbia				
Florida	32	5.00	4.72	3
Georgia	14	2.19	4.91	-
Hawaii				
Idaho	1	.16	2.78	-
Illinois	22	3.44	4.06	2
Indiana	11	1.72	6.36	2
Iowa	2	.31	1.83	-
Kansas	2	.31	1.83	-
Kentucky	5	.78	4.81	1
Louisiana	1	.16	.55	-
Maine	1	.16	2.22	-
Maryland	7	1.09	3.17	-
Massachusetts	5	.78	1.64	-
Michigan	19	2.97	4.50	3
Minnesota	1	.16	.60	-
Mississippi	2	.31	2.02	-
Missouri	6	.94	2.07	-
Montana	2	.31	6.67	-
Nebraska				
Nevada	3	.47	6.12	-
New Hampshire	1	.16	3.13	-
New Jersey	30	4.69	6.85	1
New Mexico				
New York	26	4.06	3.41	-
North Carolina	17	2.66	5.96	-
North Dakota	1	.16	7.14	-
Ohio	34	5.31	6.79	7
Oklahoma	7	1.09	4.19	-
Oregon	13	2.03	8.72	1
Pennsylvania	38	6.37	6.37	2
Rhode Island	1	.16	2.78	-
South Carolina	20	3.13	13.70	2
South Dakota				

Philadelphia Phillies (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	11	1.72	6.01	-
Texas	24	3.75	4.40	1
Utah	2	.31	3.78	1
Vermont				
Virginia	10	1.56	3.76	2
Washington	6	.94	2.55	1
West Virginia	1	.16	1.47	-
Wisconsin	5	.78	3.13	-
Wyoming	2	.31	22.22	-
(U.S. Total)	550	85.94	4.38	51
Aruba				
Australia	1	.16	20.00	-
Bahamas				
Canada	10	1.56	4.72	-
Canal Zone	1	.16	5.88	-
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	32	5.00	5.84	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	1	.16	3.33	-
Panama	5	.78	15.63	-
Puerto Rico	22	3.44	6.81	1
South Africa				
Taiwan				
Venezuela	17	2.66	8.33	1
Virgin Islands	1	.16	7.14	-
(Foreign Total)	90	14.06	6.25	2
Total	640	100.00	4.58	53

Pittsburgh Pirates

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	13	1.47	5.39	1
Alaska				
Arizona				
Arkansas				
California	83	9.36	2.71	9
Colorado	13	1.47	14.13	-
Connecticut	9	1.01	4.92	-
Delaware	5	.56	13.51	-
Dist. of Columbia	2	.23	14.29	-
Florida	33	3.72	4.87	4
Georgia	21	2.37	7.37	1
Hawaii	3	.34	11.54	-
Idaho	5	.56	13.89	-
Illinois	14	1.58	2.58	1
Indiana	17	1.92	9.83	-
Iowa	2	.23	1.83	-
Kansas	1	.11	.92	-
Kentucky	13	1.47	12.50	2
Louisiana	7	.79	3.83	-
Maine	4	.45	8.89	-
Maryland	26	2.93	11.76	1
Massachusetts	33	3.72	10.86	1
Michigan	24	2.71	5.69	1
Minnesota	2	.23	1.20	-
Mississippi	4	.45	4.04	-
Missouri	12	1.35	4.14	-
Montana	4	.45	13.33	-
Nebraska	1	.11	1.92	-
Nevada	3	.34	6.12	-
New Hampshire	1	.11	3.13	-
New Jersey	18	2.03	4.11	3
New Mexico				
New York	49	5.52	6.43	4
North Carolina	11	1.24	3.86	1
North Dakota	1	11	7.14	1
Ohio	46	5.19	9.18	5
Oklahoma	2	.23	1.20	-
Oregon	5	.56	3.36	-
Pennsylvania	96	10.82	16.08	8
Rhode Island				
South Carolina	10	1.13	6.85	1
South Dakota				

Pittsburgh Pirates (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	17	1.92	9.29	1
Texas	10	1.13	1.83	2
Utah				
Vermont				
Virginia	22	2.48	8.27	1
Washington	24	2.71	10.21	1
West Virginia	11	1.24	16.18	1
Wisconsin	3	.34	1.88	-
Wyoming	3	.34	33.33	-
(U.S. Total)	686	77.34	5.47	50
Aruba				
Australia				
Bahamas	5	.56	16.67	-
Canada	31	3.49	14.67	-
Canal Zone	7	.79	41.18	1
Columbia	1	.11	14.29	-
Costa Rica				
Cuba				
Dominican Rep.	100	11.27	18.25	5
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	11	1.24	36.67	-
Panama	8	.90	25.00	2
Puerto Rico	16	1.80	4.95	1
South Africa				
Taiwan				
Venezuela	19	2.14	9.31	1
Virgin Islands	3	.34	21.43	-
(Foreign Total)	201	22.66	13.95	10
Total	887	100.00	6.34	60

St. Louis Cardinals

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	23	2.93	9.54	-
Alaska				
Arizona	9	1.15	5.03	3
Arkansas	20	2.55	27.40	-
California	164	20.89	5.35	18
Colorado	5	.64	5.43	-
Connecticut	15	1.91	8.20	-
Delaware	1	.13	2.13	-
Dist. of Columbia				
Florida	33	4.20	4.87	5
Georgia	12	1.53	4.21	-
Hawaii	6	.76	23.08	-
Idaho				
Illinois	52	6.62	9.59	5
Indiana	2	.25	1.16	1
Iowa	11	1.40	10.09	-
Kansas	4	.51	3.67	1
Kentucky	5	.64	4.81	1
Louisiana	8	1.02	4.37	-
Maine	2	.25	4.44	1
Maryland	2	.25	.90	-
Massachusetts	34	4.33	11.18	1
Michigan	6	.76	1.42	1
Minnesota	7	.89	4.22	-
Mississippi	7	.89	7.07	-
Missouri	47	5.99	16.21	3
Montana	1	.13	3.33	-
Nebraska	3	.38	5.77	-
Nevada	1	.13	2.04	-
New Hampshire	1	.13	3.13	-
New Jersey	20	2.55	4.57	-
New Mexico	2	.25	5.13	-
New York	41	5.22	5.38	2
North Carolina	7	.89	2.46	1
North Dakota				
Ohio	10	1.27	2.00	-
Oklahoma	14	1.78	8.38	-
Oregon	5	.64	3.36	-
Pennsylvania	15	1.91	2.51	-
Rhode Island	1	.13	2.78	-
South Carolina	4	.51	2.74	-
South Dakota				

St. Louis Cardinals (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	21	2.68	11.48	1
Texas	20	2.55	3.67	3
Utah	3	.38	5.66	-
Vermont	2	.25	18.18	-
Virginia	8	1.02	3.01	1
Washington	7	.89	.43	1
West Virginia	2	.25	2.94	-
Wisconsin	4	.51	2.50	1
Wyoming				
(U.S. Total)	668	85.10	5.33	50
Aruba				
Australia				
Bahamas				
Canada	21	2.68	9.91	2
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	67	8.54	12.23	3
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua	5	.64	16.67	-
Panama	5	.64	15.63	-
Puerto Rico	15	1.91	4.64	6
South Africa				
Taiwan				
Venezuela	4	.51	1.96	-
Virgin Islands				
(Foreign Total)	117	14.90	8.12	11
Total	785	100.00	5.61	61

San Diego Padres

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	3	1.05	1.24	-
Alaska				
Arizona	4	1.40	2.23	1
Arkansas	1	.35	1.37	-
California	110	38.46	3.59	18
Colorado	1	.35	1.09	-
Connecticut	1	.35	.55	-
Delaware	1	.35	2.70	-
Dist. of Columbia				
Florida	18	6.29	2.65	-
Georgia	11	3.85	3.86	1
Hawaii	1	.35	3.85	-
Idaho	2	.70	5.56	-
Illinois	7	2.45	1.29	1
Indiana	2	.70	1.16	-
Iowa	2	.70	1.83	-
Kansas	2	.70	1.83	1
Kentucky	1	.35	.96	-
Louisiana	4	1.40	2.19	1
Maine	1	.35	2.22	-
Maryland	3	1.05	1.36	-
Massachusetts	3	1.05	.99	-
Michigan	3	1.05	.71	1
Minnesota	1	.35	.60	1
Mississippi	3	1.05	3.03	-
Missouri	3	1.03	1.03	-
Montana	2	.70	6.67	1
Nebraska				
Nevada				
New Hampshire				
New Jersey	7	2.45	1.60	-
New Mexico				
New York	20	6.99	2.62	-
North Carolina	2	.70	.70	1
North Dakota				
Ohio	7	2.45	1.40	-
Oklahoma	5	1.75	2.99	1
Oregon	4	1.40	2.68	1
Pennsylvania	6	2.10	1.01	1
Rhode Island	3	1.05	8.33	1
South Carolina	2	.70	1.37	1
South Dakota				

San Diego Padres (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	7	2.45	3.83	1
Texas	11	3.85	2.02	2
Utah				
Vermont				
Virginia	3	1.05	1.13	2
Washington	7	2.45	2.98	2
West Virginia	1	.35	1.47	1
Wisconsin	2	.70	1.25	-
Wyoming				
(U.S. Total)	283	98.95	2.26	40
Aruba				
Australia				
Bahamas				
Canada				
Canal Zone				
Columbia				
Costa Rica				
Cuba				
Dominican Rep.	2	.70	.36	-
Guatemala				
Holland				
Japan				
Mexico				
Nicaragua				
Panama				
Puerto Rico	1	.35	.31	-
South Africa				
Taiwan				
Venezuela				
Virgin Islands				
(Foreign Total)	3	1.05	.21	-
Total	286	100.00	2.05	40

San Francisco Giants

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Alabama	12	1.65	4.98	-
Alaska				
Arizona	24	3.30	13.41	1
Arkansas	7	.96	9.59	-
California	254	34.94	8.28	30
Colorado	4	.55	4.35	-
Connecticut	10	1.38	5.46	1
Delaware	1	.14	2.70	-
Dist. of Columbia	1	.14	7.14	-
Florida	20	2.75	2.95	1
Georgia	5	.69	1.72	-
Hawaii	2	.28	7.69	1
Idaho	6	.83	16.67	1
Illinois	31	4.26	5.72	2
Indiana	4	.55	2.31	-
Iowa	2	.28	1.83	-
Kansas	6	.83	5.50	1
Kentucky	3	.41	2.88	1
Louisiana	8	1.10	4.37	-
Maine	1	.14	2.22	-
Maryland	2	.28	.90	-
Massachusetts	6	.83	1.97	-
Michigan	12	1.65	2.84	-
Minnesota	6	.83	3.61	2
Mississippi	7	.96	7.07	1
Missouri	5	.69	1.72	-
Montana	3	.41	10.00	-
Nebraska	1	.14	1.92	-
Nevada	6	.83	12.24	-
New Hampshire	1	.14	3.13	-
New Jersey	16	2.20	3.65	3
New Mexico	1	.14	2.56	-
New York	32	4.40	4.20	2
North Carolina	8	1.10	2.81	-
North Dakota				
Ohio	12	1.65	2.40	1
Oklahoma	4	.55	2.40	-
Oregon	29	3.99	19.46	2
Pennsylvania	10	1.38	1.68	1
Rhode Island				
South Carolina	1	.14	.68	-
South Dakota				

San Francisco Giants (Continued)

State or Foreign Country	Number of First-Year Players	Percent of Club's First-Year Players	Percent of Area's First-Year Players	Number of Major League Players
Tennessee	5	.69	2.73	-
Texas	27	3.71	4.95	2
Utah	3	.41	5.66	-
Vermont				
Virginia	4	.55	1.50	-
Washington	22	3.03	9.36	2
West Virginia				
Wisconsin	6	.83	3.75	-
Wyoming				
(U.S. Total)	631	86.80	5.03	56
Aruba				
Australia				
Bahamas	1	.14	3.33	-
Canada	5	.69	2.36	-
Canal Zone	4	.55	23.53	-
Columbia	1	.14	14.29	-
Costa Rica				
Cuba				
Dominican Rep.	45	6.19	8.21	3
Guatemala				
Holland				
Japan	6	.83	100.00	
Mexico				
Nicaragua				
Panama	3	.41	9.38	-
Puerto Rico	16	2.20	4.95	-
South Africa				
Taiwan	1	.14	25.00	-
Venezuela	12	1.65	5.88	
Virgin Islands				
(Foreign Total)	96	13.20	6.66	3
Total	727	100.00	5.20	59

VITA[1]

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Master of Science

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