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CACTUS LEAGUE BASEBALL'S VALUE TO ARIZONA

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ABSTRACT

A brief orientation to Arizona's Cactus League was given. Tentative findings from a data base of 2,502 cases were presented. Survey data were garnered from all Arizona ballparks during the Spring of 1988. Fans were randomly approached immediately outside of or in the stadium prior to gametime. Enumerators picked up the questionnaires immediately after completion. The response rate exceeded 98 percent. There were 18 study variables. Preliminary analyses of four variables were presented. Non-Arizona residents comprised 72 percent of the sample. Sixty-six percent visit Arizona specifically for the Cactus League. Nearly one-quarter would consider going to Florida to follow their team(s). The median per game spending category was \$16-20.

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PREFACE

This report will introduce the reader to an overview of some

preliminary analyses of data gathered through on-site surveys of Cactus League baseball fans. These surveys were conducted during the 1988 season, which began the first week in March and ended the first week in April.

A lack of funding has slowed the data analysis. Once funding is secured the data will be analyzed in SPSS-X. All results presented in this paper are products of hand tabulations. Thus, the reported findings are tentative. However, the authors believe this preliminary discussion to be timely, substantive and intriguing. Much more comprehensive and detailed information will be forthcoming after the data base (comprised of 2,502 cases by 18 variables) is subjected to computer analysis.

## INTRODUCTION

The arrival of spring in the metropolitan regions of Arizona means much more than the departure of the cooler, hazy days of winter--it means professional baseball. The spring training season in Arizona is known as the Cactus League, and it begins during the first week in March.

Professional baseball has been a part of Arizona since 1947. Traditionally, this spring training season is a laid back affair that the residents appreciate and the winter tourists (aka snow birds) flock. However, the tradition is threatened due to the heightened perceptions of the economic values associated with this leisure phenomenon. Economics reign tantamount as Arizona and Florida gear up for a turf battle that will determine the fate of the Cactus League.

### The Grapefruit League

A 1987 study commissioned by the Florida Department of Commerce suggested that the Florida Grapefruit League contributed nearly \$300 million to the state economy.(3) Florida Governor Bob Martinez told major league managers at their 1987 annual meeting that the teams training in Florida generate between \$500 million and \$1 billion in tourism spending annually.(1) Ron Stafford, the Florida Department of Commerce's special assistant for sports promotion, estimated each major league camp's value at between \$3 and \$4 million per season.(5) According to the Florida DOC, the Grapefruit League accounts for as much as five percent of the state's \$20 billion tourism industry.(6)

### Cactus League

If an annual worth of \$5 million is attributed to each Arizona-based club, then the Cactus League generates about \$35 million of economic activity per year. According to the Yuma Chamber of Commerce (preseason home of the San Diego Padres) the league adds nearly \$8 million to the city's economy.(7) A 1988 study completed for the Mesa, Arizona Visitors and Convention Bureau concluded that the Chicago Cub's presence was worth

in excess of \$37 million annually to that city of 270,000.(2)

Early in 1988, rumors began to circulate, suggesting that several Cactus League teams were being wooed, and were seriously considering, moving into the Grapefruit League. As the year has progressed, these rumors have been confirmed. If as few as two of the Cactus League teams leave the region, the ramifications on the Arizona baseball plant would be devastating. This situation would deprive the league of its critical mass, and would most likely lead to its total collapse.

#### PROBLEM

Impressive incentives and aggressive marketing by Florida interests are posing a threat to the viability of Arizona spring professional baseball. Arizona government and civic leaders are seeking reliable data pertaining to the value of the Cactus League to the state, with hope of being able to then convince those holding the "purse strings" to sweeten the incentives to the Arizona clubs and thus stymie the overtures from Florida.

#### PURPOSE

This study was undertaken in order to generate reliable data and a valid assessment of the economic, and to some extent, the sociopsychological value of the Cactus League to the State of Arizona. While a few studies have been commissioned to assess the impact of specific teams on their host communities, this is the first comprehensive evaluation of the seven Arizona based teams.

#### Hypothesis

Four hypotheses will be explored in this phase of the study:

H11: Out-of-state tourists comprise a significant proportion of the Cactus League spectator occasions.

H21: Cactus League fans who go to the games perceive that the presence of the League contributes to their quality of life while in Arizona.

H31: On the average, each Cactus League fan spends more than \$10 per spectating occasion.

H41: A significant number of Cactus League fans visit Arizona specifically for the baseball games.

## Limitations

1) Due to limited resources, a sample of Cactus League spectators (fans) had to be drawn. A sample quota of 2,500 was established and met.

2) In order to reduce the chances of response fatigue and minimize the disruption of the fans' leisure experiences, the questionnaire was restricted to two pages in length.

3) There were differences in the number of games covered at each of the ballparks due to 1) host club restrictions and/or 2) availability of enumerators.

4) The number of fans completing questionnaires varied from game to game--depending on 1) the number of enumerators working a given game, 2) the amount of time available for gathering the information, and 3) the speed of the respondents when answering the questions.

## Definition of Terms

Spectating occasion      The physical presence of an individual spectator in a ballpark during a baseball game.

Economic impact      The measurable contribution of Cactus League activity to the economy of Arizona.

Fan      A person who engages in a spectating occasion.

## PRELIMINARY ANALYSIS

Eighteen questions were presented to Cactus League fans in a self-administered questionnaire format. The responses to four of these questions will be addressed in this paper. From this point on, the baseball teams and sites will be referred to by the city in which they are located.

## METHODOLOGY

### The Sample

Given logistical limitations such as length of time, human resources and working funds, along with an assessment of the required parameters for statistical treatment, a quota of 2500 completed questionnaires was established prior to data collection. The researchers had to dialogue with representatives from each of the ballclubs concerning the method and timing of the data gathering. In six of the seven ballparks, the enumerators were given free reign to cover the entire stadia to conduct

the survey. In Scottsdale (San Francisco Giants) the data had to be acquired outside of the entrance into the ballpark. In both cases, the researchers are confident that the sample is reasonably representative of the overall fan population for the following reasons:

1) Fans were randomly approached while standing in lines or at their seats in various locations throughout the stadia.

2) Data were gathered throughout the Cactus League season, on weekdays and weekends, and at both day and night games.

3) Fewer than 30 persons declined to complete the surveys which resulted in a response rate of nearly 99 percent! This rate of return virtually eliminates non-response bias.

#### The Instrument

A two-page (printed front and back) 18-question instrument was developed. The survey dimensions included expenditures, satisfaction, interest/significance, degree of involvement with Cactus League baseball, and demographic characteristics. Several variables were operationalized to tap these dimensions. The response formats elicited normal, ordinal, internal, and ratio level data.

#### Analysis and Discussion

H11: Out-of-state tourists comprise a significant proportion of the Cactus League spectator occasions.

Nearly 72 percent of the respondents indicated that they did not consider Arizona to be their resident state. This was determined by the following responses:

1) The open-ended question was asked, "What town and state do you consider your permanent home?"

2) A section of the questionnaire was designated for non-Arizona residents only.

A comparison of these two responses provides an excellent internal reliability check. Over 85 percent of the sample who responded to one responded to both.

It is obvious from these findings that out-of-state tourists comprise a very significant proportion of the Cactus League spectator occasions. Projecting the 72 percent non-resident composition to the 1988 total attendance indicates that nearly 400,000 out-of-state spectator occasions occurred.

After the researchers tabulate the responses to the question "How many games do you plan to attend in Arizona this year?", an estimate of the actual number of participating non-residents will be projected.

H21: Cactus League fans who go to games perceive that the presence of the league contributes to their quality of life while in Arizona.

The sample was asked to respond to the question "To what extent does the Cactus League contribute to your life while in Arizona?" by circling a point on a seven-point Likert scale. The response categories ranged from "very little" to "a great deal." Eighty-two percent of the 2,353 respondents to the question indicated that Cactus League baseball contributed at least "somewhat." The highest point on the scale, "a great deal," garnered the most response of any category with 28 percent. Another 26 percent of the responses fell in the range of 5-6 (5 representing "quite a deal").

Quality of life is an emorphous concept that may be difficult for people to express. This may partially explain why about 18 percent of the respondents indicated very little Cactus League contribution to their lives. Another partial explanation might be that a substantial number of fans either drive or fly to Arizona for one to three ballgames, then immediately leave the state. Consequently, they do not associate the Cactus League with life in Arizona. Their entire focus and brief Arizona experience may be defined by baseball. For this group, the fact that the Cactus League takes place in Arizona may be insignificant. Finally, a portion of the spectator occasions are undoubtedly experienced by the curious, and those who are there under some sense of obligation and not completely of their own free wills. These disinterested parties probably constitute a modest percentage (perhaps up to 10 percent) of the universe of spectator occasions.

H31: On the average, each Cactus League fan spends more than \$10 per spectating occasion.

This hypothesis is evaluated in light of the responses to the following question: "Estimated amount of money spent per game (include travel and miscellaneous expenses.)"

The following close-ended response categories were presented:

less than \$ 5.00	\$ 6 - 10.00
\$11 - 15.00	\$16 - 20.00
\$21 - 25.00	\$26 - 30.00
\$31 - 35.00	more than \$35.00

During a review of the first week's completed questionnaires it was noted that many respondents were indicating that they spent far in excess of \$35.00 per game. Therefore, the researchers revised the response format by adding three additional categories: ( ) \$36 - 200.00; ( ) \$201 500.00; and ( ) more than \$500.00. Since several hundred responses were gathered before the change was implemented, that analysis of these data understate the average per game expenditure. Table 3 presents a summary of these expenditures by category.

The response rate for this question exceeded 98 percent. Of the 2,478 responses, 53 percent reported spending at least \$16 per game.

Projected over the total 1988 attendance, that suggests over 293,000 spectator occasions with a minimum expenditure of \$16. Yuma had the highest per capita expenditures, as over 40 percent reported per game expenditures exceeding \$35 and only 12 percent claimed to spend less than \$11 per outing.

Yuma's high ranking in per game expenditures may be largely explained by geographical factors. The city lies approximately 200 miles from the other Arizona-based ball teams and major metropolitan areas. Therefore, significant travel expenditures will be incurred by non-Yuma residents who drive or fly there to attend games.

Eighty-three percent of the respondents in Yuma were not Arizona residents. This figure is nearly 20 percent higher than the non-resident attendance average for the other six Arizona cities. The preponderance of non-residents can be partially explained by the relative proportion of winter visitors to the Yuma area. With a year-round population of approximately 40,000, Yuma swells to twice this number during the winter months!(9) Nearly 82 percent of the non-resident fans surveyed in Yuma indicated that they were from the San Diego area. San Diego, California, the regular season home of the Padres, is a three-hour drive from Yuma. Since it is a minimum 300-mile roundtrip drive from the San Diego area to Yuma, this outing requires at least one day away from home. This is a considerable contrast to the five teams in the Phoenix metropolitan area--all of which are within one and one-half hour's drive from a population base exceeding two million. The other location, Tucson, is a two-to-three hour drive from the Phoenix area, but unlike Yuma, does not have its home city (Cleveland, Ohio) within easy driving distance!

H41: A significant number of Cactus League fans visit Arizona specifically for baseball.

The following question was posed in the non-Arizona resident section of the questionnaire: "Do you come to Arizona specifically to watch Cactus League play?"

Of the 1,693 respondents to this question, 66 percent answered yes. When this group was disaggregated by location, it was noted that three ballparks were above the overall 66 percent rate. Table 5 presents a breakdown of the yes response by actual number and percentage.

As noted in the data, only Chandler had less than a 50 percent affirmative response to the question. In total, over 1,100 people said that they come to Arizona specifically for the Cactus League. This response suggests that the Cactus League is a strong "pull" factor (4) for thousands of out-of-state residents. In fact, projecting these ratios over the 1988 league attendance suggests that in excess of 260,000 spectator occasions would be influenced by this "pull" factor.

#### SUMMARY

This report presents a few tentative findings from an investigation of the value of the Cactus League to Arizona. The League is currently in



jeopardy as several of the major league clubs are considering moving to Florida. Civic and business leaders in Arizona are seeking substantive information concerning the value of spring baseball in order to know how to respond to the overtures from Florida interests.

The current study constitutes the first comprehensive empirical investigation of the Cactus League. The primary analysis and discussion of the findings suggests that the Cactus League is a valuable Arizona resource. Its importance to the state's tourism industry is noted. It appears that the dissolution of the Cactus League would have a significant deliterious effect on the Arizona economy and would diminish the quality of life for a segment of out-of-state visitors and Arizona residents.

As the data analysis proceeds, a sharper and more comprehensive picture of the Cactus League's value will emerge. The researchers are confident that the ensuing information will prove useful to decision makers. The writers' greatest concern is that two or more teams will decide to leave Arizona before all of the information is developed and disseminated. Such a scenario would most certainly spell doom for this unique slice of Arizona life.

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Table 1

1988 Attendance at Cactus League Games in Arizona

City	Team	Attendance
Chandler	Milwaukee Brewers	83,906
Mesa	Chicago Cubs	134,516
Phoenix	Oakland Athletics	85,606
Scottsdale	San Francisco Giants	61,991
Tempe	Seattle Mariners	55,824
Tucson	Cleveland Indians	66,808
Yuma	San Diego Padres	<u>65,224</u>
Total		553,855

Table 2  
 Number and Percentage of Respondents  
 by Likert Category

Category	Number	Percent
1 (very little)	319	13.6
2	105	4.5
3 (somewhat)	444	18.9
4	183	7.8
5 (quite a deal)	527	22.4
6	115	4.9
7 (a great deal)	<u>660</u>	28.1
Total	2,353	

Table 3  
 Respondent Expenditures per Game  
 N = 2,478

Amount	Overall Percentage
Less than \$5.00	4.6
\$ 6 - 10.00	14.0
\$11 - 15.00	29.0
\$16 - 20.00	6.0
\$21 - 25.00	18.0
\$26 - 30.00	4.0
\$30 - 35.00	6.4
More than \$35.00	17.7

(Numbers rounded to nearest tenth  
 of a percent)

Table 4  
 High and Low Expenditures by Stadium  
 N = 2,478

City	% of expenditures less than \$11.00	% of expenditures greater than \$35.00
Chandler	16	8
Mesa	20	10
Phoenix	21	17
Scottsdale	24	10
Tempe	24	16
Tucson	30	14
Yuma	12	41

(Numbers rounded to the nearest percent)

Table 5  
 Number and Percent Traveling To Arizona  
 Specifically for the Cactus League

Location	Number Yes	Percent Yes
Yuma	298	75
Phoenix	142	72
Tempe	238	69
Scottsdale	75	63
Tucson	53	55
Mesa	184	54
Chandler	55	42

(Numbers rounded to the nearest percent)