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Demographics of consumptive and non-consumptive recreationists in Southeast Kansas

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Introduction

Nature Recreation

With almost half of all Americans recreating outdoors (Watkins, 2019), the natural resource recreation sector is becoming more important on various fronts, whether socially, economically, or politically. Many state and national parks, including public lands and waterways, are deemed the foundation of our outdoor recreational economy.

Funding for Natural Resource Conservation

Collective budgets of state fish and wildlife agencies total roughly \$5.6 billion with nearly 60% of their funding coming from equipment taxes (e.g., Pittman-Robertson Act for hunting-related equipment) and state hunting and fishing licenses (Watkins, 2019; Fig. 1). These fees and licenses are associated with consumptive recreation activities, such as hunting, fishing, and trapping, compared to non-consumptive nature-based activities, such as hiking, swimming, and photography.

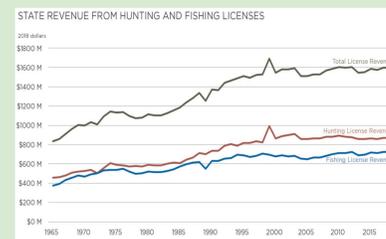


Figure 1. Revenue trends from hunting and fishing licenses from 1965 – 2018 (Watkins, 2019).

Shifting Demographics

Engagement in nature-based activities differ by age, culture, location, and more demographic variables (Decker et al., 2012). Particularly, consumptive wildlife users tend to be white, older, and live in rural areas (USFWS, 2016). There has been a sharp decrease in consumptive recreation rates over the past decade, which has been linked to increased urbanization and uneven participation differences across cultural groups (USFWS, 2016). This decline in consumptive recreation rates can severely impact future conservation funding.

Objectives

Our project objectives were to:

- Describe how people in southeast Kansas engage with nature (i.e., consumptive vs. non-consumptive uses)
- Determine who is engaging with nature (i.e., demographics)
- Identify demographic links and impacts regarding potential conservation funding

Study Area



Figure 2. (A) Southeast Kansas Nature Center and (B) map of Schermerhorn Park.

- We conducted our study at the Southeast Kansas Nature Center located in Schermerhorn Park, which is located along Shoal Creek in Galena, Kansas (Fig. 2).
- The land for the park was donated in 1922 and the park is managed by the Kansas Department of Wildlife and Parks, as well as the City of Galena.
- Schermerhorn Park is located within the Ozark Plateau geologic region and has many unique features, including caves and nature trails.
- The Southeast Kansas Nature Center offers educational programming, exploration drawers, and exhibits of plants, wildlife, and native history.

Methods

Survey Development and Dissemination

- We developed a survey with 22 questions, but we will focus on seven questions here.
- The survey was approved by the Pittsburg State University Institutional Review Board (Approval #AS22-033). The survey was distributed to adults (aged 18+) on March 9, 2022, and we downloaded preliminary data on March 24, 2022.
- The survey was available online through a direct link and printed QR code. Park visitors could scan the QR code at the visitor center. The survey code was also shared via social media (i.e., Facebook and Twitter).
- We conducted a convenience and snowball sampling approach. Visitors were encouraged to take the survey at the Nature Center, while the link was shared online to encourage people to pass along the survey once they took it themselves.
- Responses were averaged and sorted by consumptive users and non-consumptive users.

Results

Engagement With Nature

- All 77 respondents participated in at least one non-consumptive use of nature.
- Hiking and nature walks were the most common non-consumptive activity, while fishing was the most common consumptive activity (Fig. 3).
- 58% respondents participated in consumptive recreation (i.e., fishing, foraging for wild mushrooms or plants, hunting, or trapping). Of those, 78% have a hunting or fishing license, or plan to purchase one.

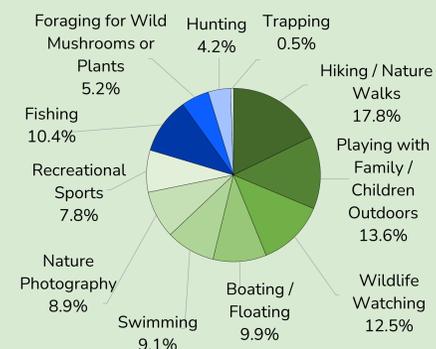


Figure 3. Outdoor activities survey respondents frequently participate in, sorted by consumptive (blue) and non-consumptive (green) activities.

Demographics

- Ages varied in both categories from 18 to 70 years old, but consumptive recreationists were younger on average (Table 1).
- While most respondents identified as White/Caucasian (94%), more people within the BIPOC community engaged in consumptive recreation activities than not (Table 1).

Potential Impacts to Conservation Funding

- 22% of consumptive recreationists had children at home under the age of 18. This could be a leading factor into encouraging younger generations to partake in consumptive use whether it be hunting, fishing, trapping, or foraging.
- Over half of all respondents had a current hunting or fishing license, or plan to purchase one soon (56%), while the remainder were not interested in obtaining a license. A few people who do not participate in consumptive activities still buy licenses (9%; Table 1).

Conclusions

Comparisons to National Trends & Solutions

This study shows recreationists in Southeast Kansas area do not follow national trends in consumptive recreation rates and demographics. Over half of our surveyed respondents participated in consumptive recreation activities, and those who did were younger and more diverse. This is an important finding with the worry of younger generations not participating in consumptive activities, leading to issues in funding (Moore, 2021).

Even so, a large portion of the public was not purchasing licenses (44%), which fund local conservation efforts. The idea of minute entry fees paid by hikers, bird watchers, kayakers, and other visitors would spread the cost of visitor impacts over a wider base including both consumptive and non-consumptive users. By combining the approach above with the continuance of recruiting, retaining, and reactivating hunters and anglers, outdoor recreation will be appropriately funded for the future.

Future Research

This study only focused on a group of 77 survey respondents. Having such a small sample size could bias trends that we are observing. We also did not conduct any statistical analyses, which would be helpful in assessing data collected in future surveys. We would like to expand our sample geographically to determine if these trends hold outside of rural southeast Kansas. Future surveys should include questions to assess why non-consumptive recreationists purchase licenses and ways to engage more people in nature-based activities.



Figure 4. Human Dimensions of Natural Resource Management students visiting the SEK Nature Center.

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