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Welcome to the second issue of the **Southwick Newsletter**, focusing on fish, wildlife, and outdoor economics and statistics. This newsletter highlights new research, and helps explain how sound data can boost conservation and management efforts. More is available at www.southwickassociates.com.

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- ✚ **How Many Hunters Are There? –Using License Databases to Learn More about Hunters and Anglers**

Nearly every state resource agency and sportsmen's organization desires to increase license revenues or participant numbers. With the recent advent of electronic fishing and hunting license sales systems such as phone sales and retailer POS systems, many states now have the data needed to develop *scientific* strategies to increase license revenues and sportsmen's numbers.

In cooperation with the Texas Parks and Wildlife Department (TPWD), Southwick Associates took a preliminary look into the Texas license database. One significant finding related to the Texas hunter population. TPWD records show 1.03 million hunting licenses were sold in FY 2003. However, more people may consider themselves hunters, but for some reason, did not buy a license in 2003. With that understanding, how many Texans could be considered hunters? By tracking the license buying habit of individual hunters over the past five years, we learned

- *Only one of two people (48 percent) who bought a Texas hunting license at least once in the last five years actually bought one in the most recent year.*

This indicates that 1.03 million licenses were sold to a potential customer base of 2.15 million people. This information can now be used to solicit greater political support for hunting and conservation, as well as recruiting new private sector partners to assist such efforts.

Using the same research approach, preliminary research indicates:

- *Only one-quarter of Texas hunters bought a license in each of the last five years.*

From a marketing standpoint, this is bad. But on the upside, it indicates revenues could be boosted by implementing a new license structure that encourages 3 or 5-year licenses, or by providing incentives for hunters to buy their licenses earlier in the year. There is an old marketing axiom that states it is easier to boost revenues from existing customers than to recruit new customers. This certainly holds true when trying to boost license revenues.

Traditionally, we have thought of hunters as a homogenous group, and often use assumptions to fill in gaps about our knowledge of hunters and anglers. But these stereotypes and generic profiles can mislead us and cause future marketing efforts to fail. State licensing databases can also provide a wealth of insights about hunter and angler lifestyles and trends that will significantly enhance recruitment programs and boost license revenues. Our Summer 2004 newsletter will provide additional examples and data.

Understanding the Factors That Cause Boat Accidents

For years, the boating safety community has collected data on boating accidents. The results have been used successfully to help prevent future accidents, with a 26% percent decrease in fatalities per 100,000 registered boats in the last twelve years. Regardless, in 2002, there were still 750 boating fatalities in the U.S.

Spearheading the effort to make waterways safer, the U.S. Coast Guard's Office of Boating Safety (USCG) is identifying variables that lead to boat accidents. The USCG has long realized that a simple look at accident statistics often does not tell the whole story. For example, assume you are responsible for boating safety in New England and want to address an alarming increase in fatalities related to capsized boats. A simple analysis of boat accident data shows you that canoes are more likely to capsize than motorboats, but also more likely to be caught in strong currents and more likely to be overloaded compared to motor boats. Do canoes capsize on their own accord, or are they more likely to be in dangerous situations, such as strong currents or overloaded, that lead to capsizing? Which of these factors is the greatest cause of capsizing-related fatalities? Knowing the right answers will lead to better safety campaign.

Assessing which variables have the greatest impacts on accidents, and how these variables interact with each other, typically requires the services of a statistical expert. Most boating administrators do not have this luxury. To address this need, Southwick Associates, in cooperation with JCSystems, Inc. and the Center for Recreational Boating, has worked with the USCG to develop a software tool that allows boating administrators with little statistical background to gain deeper insights into accident data. Known as BRAINS (**B**oating **R**isk **A**nalysis **I**nformation **S**ystem) – an acronym we have lots of fun with – the USCG now mines accident data much more efficiently than before. Simply, BRAINS recognizes that two or more variables commonly interact with each other to cause boat accidents. As a result, by using BRAINS, you can determine which variables have the greatest effect on accidents.

So, in the canoe example above, by using BRAINS you quickly learn that:

- An overloaded motor boat involved in an accident is 5.6 times more likely to capsize.
- Canoes were 4.2 times more likely to have capsized than motor boats, and

- The presence of a strong current increased the likelihood of a motorboat capsizing by 2.2 times.

You now know that overloaded boats may be the biggest problem. You – and other safety officials - can now design more effective programs to reduce injuries and fatalities from capsizing. Learn more, and use our BRAINS for free, by visiting www.boatingrisk.com. The BRAINS concept can be applied to other databases such as hunting accidents, creel survey data, and more. Please contact Southwick Associates if you have any questions about BRAINS and its applications.

Wildlife Viewing Economics – Bigger Than Many Think

Comparable to hunting and fishing, billions of dollars are spent each year nationally by wildlife viewers for supplies & materials, access and transportation. While wildlife viewers spend their dollars for their own personal motivations, such expenditures in turn benefit countless others by creating jobs, tax revenues and other economic opportunities. Let's look at some interesting facts from recent Southwick Associates' studies regarding the economic significance of wildlife viewing activities:

Pennsylvania:

- Wildlife watching, photography and feeding is enjoyed by 3.4 million Pennsylvania residents – nearly twice as many as the combined populations of Philadelphia and Pittsburgh.
- The total spent on watchable wildlife recreation in Pennsylvania could purchase 44.8 million tickets to Pittsburgh Pirates baseball games, enough to sell out every home game for the next 14 seasons.

Florida:

- The total spent annually in Florida for watchable wildlife recreation is twice as much as the value of the state's annual orange harvest.
- The state sales tax revenue generated by watchable wildlife activity in Florida could fund the annual salaries for up to 2,200 more teachers.

Colorado:

- Wildlife viewing-related expenditures in just Colorado alone are greater than all snow ski equipment sales nationally.

Arizona:

- In 2001, watchable wildlife recreationists in Arizona spent an amount 2.5 times greater than the national box office revenues for "Harry Potter and the Sorcerer's Stone" –the top grossing film in the U.S. in 2001.

Arkansas:

- Wildlife watching, photography and feeding in Arkansas is enjoyed by 841,000 people (both residents and non-residents) – more than the population of the state's largest metropolitan area, Little Rock.

West Virginia:

- Nearly one of every four West Virginia residents participates in some form of wildlife watching activities.

The above factoids were produced for each state's respective fish and wildlife agency. Visit www.southwickassociates.com to download free copies of the complete reports.

Coming soon from the American Sportfishing Association!

Indices tracking the top factors driving sportfishing participation, plus quarterly fishing license sales indices, will be released soon. Produced for the [American Sportfishing Association](#) by Southwick Associates, Inc., these indices will be updated quarterly and will be available from the ASA's newsletter and [website](#).

In The Next Issue:

- Economic threats from aquatic nuisance species
- Increasing hunter numbers and license revenues, Part II.
- Maryland Nutria, and more...

Southwick Associates, Inc. specializes in natural resource & environmental economic and statistical research. Our staff is comprised of economic and statistics professionals throughout the U.S. who have in-depth experience measuring the values, benefits and revenues possible from fish, wildlife, and water-related natural resources plus their associated uses. We can help clients better address many legal, legislative and public communication issues through the practical application of reliable and accurate economic information.

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