National Survey on Recreation and the Environment 2000

Current Participation Patterns in Marine Recreation

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By

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FOREWORD

The 1999-2000 National Survey on Recreation and the Environment (NSRE) is the latest in a series of national surveys that was started in 1960 by the Outdoor Recreation Resources Review Commission (ORRRC). The federal government (ORRRC) initiated this National Recreation Survey (NRS) to assess outdoor recreation participation in the United States. Since that first in-the-home survey in 1960, six additional NRS's have been conducted —1965, 1970, 1972, 1977, 1982-83 and 1994-95. Over the years, the NRS surveys have changed in their methodology, composition, funding, and sponsorship.

In 1960, interviews were done in person over the four seasons of the year. In 1965, interviewing was done only in early fall. The 1970 survey instrument was a brief mailed supplement to the National Fishing and Hunting Survey. The 1982 survey was conducted in person in cooperation with the National Crime Survey, and the 1977, 1994, and 2000 surveys were conducted by telephone.

In 1994 the NRS was renamed the National Survey on Recreation and the Environment (NSRE). This new name was introduced to reflect the growing interest and emphasis of the U.S. population about their natural environment. Accordingly, the NSRE was expanded to include questions concerning peoples' wildlife and wilderness uses, environmental values, and attitudes regarding public and management issues. Additional information pertaining to the recreational needs of people with challenging and disabling conditions was also included.

NSRE 2000 is the eighth in the continuing series of U.S. National Recreation Surveys. Although similar to the previous national surveys, NRSE 2000 explores the outdoor recreational needs and environmental interests of the American people in greater depth. The growth of NRSE 2000 reflects the continuing growth of interest in our nation in outdoor recreation and our natural environment.

NSRE 2000 is an in-the-home phone survey of 50,000 households across all ethnic groups throughout the United States. Questions from NSRE 2000 broadly address such areas as outdoor recreation participation, demographics, household structure, lifestyles, environmental attitudes, natural resource values (for example, concerning Wilderness), constraints to participation, and attitudes toward management policies.

The funding and responsibility of the NRS's have also changed quite considerably over the years. Initially the Outdoor Recreation Resources Review Commission, which did the first survey in 1960, recommended that subsequent surveys be completed at five-year intervals, but consistent funding and responsibility were not created. From 1965 through 1977, the Bureau of Outdoor Recreation and its successor, the Heritage Conservation and Recreation Service, did the research. Those agencies were abolished in 1981, and responsibility fell to the National Park Service in the U.S. Department of the Interior (USDI). The National Park Service coordinated the development of a consortium that included itself, the Forest Service in the U.S. Department of Agriculture (USDA), the Department of Health and Human Service's Administration on Aging, and the USDA's Bureau of Land Management. By the late 1980's, it was clear that the National Park Service would no longer assume the financial and organizational demands of such a large survey. Park Service Officials asked the Forest Service to assume its coordinating role for the next National Recreation Survey. The Outdoor Recreation and Wilderness Assessment Group, a part of the research branch of the Forest Service, assumed this role jointly with the National Oceanic and Atmospheric Administration (NOAA). This joint role between the Forest Service Outdoor Recreation and Wilderness Assessment Group in Athens, GA and NOAA has continued to the present day and includes responsibility for the current NSRE 2000 survey.

The present list of sponsoring agencies for the 1999-2000 NSRE effort includes the USDA Forest Service, NOAA, the USDA's Economic Research Service, the U.S. Environmental Protection Agency, USDA Bureau of Land Management, the National Park Service, the University of Georgia, and the University of Tennessee. In addition, valuable assistance and resources were also provided by the American Horse Council, the American Motorcyclist Association, the American Recreation Coalition, B.A.S.S., Inc., the Carhart Wilderness Training Center, the Corps of Engineers, the Forest Service (specifically the Carhart Wilderness Training Center, Ecosystem Management Coordination, Recreation Staff, the Rocky Mountain Research Station, and Wildlife Staff), the Motorcycle Industry Council, the National Association of Recreation Resource Planners, the National Association of State Outdoor Recreation Liaison Officers, the National Environmental Education & Training Foundation, the Natural Resources Conservation Service, the Outdoor Recreation Coalition of America, the Rails-to-Trails Conservancy, the Recreation Vehicle Industry Association, the Snow Sports Industries of America, the U.S. Orienteering Federation, and the Wilderness Society.

In addition to versions one through six of the NSRE 200 used in Leeworthy (2001), this report also includes data from versions seven and eight. It is also important to note that participation estimates presented in this report are based on the estimate of U.S. population from November 1999 (206.2 million) while future NSRE work will use the population estimate from November 2000 which is 213.1 million. This accounts for slight differences in the number of participants reported herein and in future work.

All versions of the NSRE 2000 questionnaire and project results are being posted on the following web site: http://www.srs.fs.fed.us/recreation/nsre.html

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Introduction

NSRE 2000 is the first National Survey to include a broad assessment of the Nation's participation in marine recreation. Approximately every five years since 1955, the U.S. Fish and Wildlife Service has conducted a National Survey of Fishing, Hunting and Wildlife Associated Recreation. But the marine component of recreation was only broken out for saltwater fishing. In 1979, the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS) initiated the Marine Recreational Fisheries Statistics Survey (MRFSS). This survey is an annual survey of catch and effort. So prior to the NSRE 2000, national surveys of marine recreation have been limited to saltwater fishing.

Marine Recreation. We originally called the marine recreation module in the NSRE 2000 the Coastal and Ocean Participation Module. We defined Coastal and Ocean participation as participation in at least one of nineteen activities/settings. Survey respondents were asked if they participated in an activity/setting "in freshwater, saltwater or both" for activities and "in freshwater or saltwater surroundings or both" for settings (e.g. beaches, watersides besides beaches, viewing activities and hunting for waterfowl). The respondent was told that for saltwater or saltwater surroundings, in addition to oceans and sounds, to please include mixed fresh-salt water in tidal portions of rivers and bays.

Under the Coastal Zone Management Act (16 USC 1451, et seq.), the Great Lakes are now officially considered "coastal". Since the Great Lakes are freshwater, the NSRE 2000 did not specifically break out participation in the Great Lakes. So to be technically correct we changed the title from Coastal Recreation to Marine Recreation.

A key difference in the Marine Recreation Participation Module of the NSRE 2000 and the rest of the participation module is that the Marine Recreation Module asks in which states participation took place (up to five states for each activity/setting), and for 16 of the activity/settings, the number of days in each state.[1]

Participation Rate. "Participation Rate" is the percent of the civilian non-institutionalized population 16 years or older in all households of the U.S. that participated in a particular activity or visited a particular setting over a 12-month period.

Participants. Number of participants is equal to the participation rate multiplied by the non-institutionalized population 16 years or older in all households of the U.S. as of September 1999 or 206,171,709 (U.S. Department of Commerce, Bureau of the Census). Estimates provided here are in millions of participants and rounded to three decimal places, or nearest thousand.

Days. As discussed above, we asked respondents for the number of days they participated in each activity or visited each setting over the past 12 months in each state. Respondents were instructed to include any part of a day as a whole day. Days is equal to one person doing an activity or visiting any setting for any part of a day. Days are not generally additive across activities since a person can participate in multiple activities or visit multiple settings in a given day or participate in activities at particular settings (e.g. swim, fish and view birds and wildlife at a beach).

Double Counting. It is also not appropriate to add the number of participants across activities/settings. Again, the reason is that people can participate in multiple activities/settings. When we report the participation rate and the number of participants across activities/settings, we eliminate double counting. For example, "Any Marine Recreation" includes the number of people that participated in at least one marine recreation activity or visited at least one marine setting, and if the person participated in more than one activity or visited more than one setting, they are only counted once. The same is true for adding across states.

Total days of water-based activities (freshwater and saltwater) were often less than the total number of days in saltwater when added across states. Some of this discrepancy was explained by double-counting across states. It is possible, for example, to motorboat down a river separating two states and participate in a portion of a day of motorboating in more than one state. We eliminated this type of double-counting in the totals for each activity/setting across states, so the addition of days for each activity/setting across states will be greater than the total reported across states.

[1] The number of days by State was asked for all marine recreation activities/settings except canoeing, kayaking and rowing. Given that national participation rates would not yield enough observations to reliably estimate the number of days by state, the days question were eliminated to save survey time.

Days Estimation. Besides the elimination of double-counting, we estimated days of activity under three scenarios representing a range of estimates. Sample outlier values (days greater than 200) had significant influence on estimated mean number of days. This was especially true for beach visitation and the three viewing activities.

We produced a low, medium and high estimate for each activity/setting in each state. For the low estimate, we deleted all sample observations with values exceeding 200 days. In the medium estimate (values reported in all tables in the report) we censored days to 200, i.e., we set all days greater than 200 days to 200 days when calculating mean number of days per person. For the high estimate , we made no adjustments to the data. In the sections on each activity/ setting the low and high estimates are given for all states. In future reports, we will report the full results and confidence intervals on the estimates.

Sample. For estimating participation rates, number of participants and developing demographic profiles, Versions one through six of the NSRE 2000 were used. Versions one through six included 27,854 completed interviews conducted between July 1999 and December 2000. We found that national participation rates stabilized at around 5,000 completed interviews (the approximate amount in each version).

For estimating days, we originally targeted a sample size of 50,000. Versions seven, eight and nine yielded an extra 15,014 to bring our total completed sample to 42,868. This sample was used for estimating the number of days by activity/setting for each state.

More Complete Results. Although a fairly extensive treatment of marine recreation participation is presented here, more extensive tabular summaries of participation can be found in Leeworthy (2001). Future reports will also be available on tabular summaries of days and forecasts of participation and days of activity to year 2005.

References

Leeworthy, Vernon R., 2001. *Preliminary Estimates from Versions 1-6: Coastal Recreation Participation, National Survey on Recreation and the Environment (NSRE) 2000*. Silver Spring, MD: National Oceanic and Atmospheric Administration, National Ocean Service, Special Projects Office. May 2001, 46 pp. Portable document format (PDF) located at http://www.srs.fs.fed.us/ trends/nsresum.html.

Leeworthy, Vernon R. and Wiley, Peter C., 2001. *Marine Recreation Participation and Use, National Survey on Recreation and the Environment (NSRE) 2000*. Silver Spring, MD: National Oceanic and Atmospheric Administration, National Ocean Service, Special Projects Office. Forthcoming.

Number of Participants by State of Activity

In 1999-2000, over 43 percent of the civilian non-institutionalized population, 16 years and older participated in at least one of the 19 marine outdoor recreation activities/settings included in the NSRE 2000. This translated into over 89 million participants.

Florida was the number one destination for marine recreation. Over 22 million participated in some form of marine recreation in Florida. California ranked second with almost 18 million participants. Following these two top states, participation falls off. Third ranked South Carolina had almost 6.5 million participants, followed by New Jersey with a little over 6.2 million and Texas with a little under 6.2 million.

Participation rates here are the percent of the U.S. population that participated in an activity/setting in a particular state. For example, 10.7 percent of the civilian non-institutionalized population, 16 years and older, in the U.S. participated in at least one marine recreation activity/setting in Florida. This translates into over 22 million participants in Florida.

Number of Participants by State in Which Activity took Place

State	Participation Rate (%)	Number of Participants	Rank
Florida	10.70	22,060,908	1
California	8.71	17,654,215	2
South Carolina	3.14	6,469,023	3
New Jersey	3.02	6,224,769	4
Texas	2.99	6,167,691	5
North Carolina	2.70	5,576,629	6
New York	2.67	5,503,395	7
Massachusetts	2.38	4,904,006	8
Maryland	2.38	4,901,728	9
Virginia	2.37	4,878,313	10
Hawaii	2.20	4,540,543	11
Maine	1.82	3,753,337	12
Washington	1.66	3,429,729	13
Oregon	1.54	3,183,483	14
Rhode Island	1.28	2,641,812	15
Alabama	1.24	2,549,078	16
Connecticut	1.11	2,294,362	17
Georgia	1.10	2,262,763	18
Delaware	1.05	2,168,108	19
Louisiana	1.05	2,165,830	20
New Hampshire	1.03	2,120,282	21
Mississippi	0.87	1,801,442	22
Alaska	0.84	1,725,078	23
District of Columbia	0.13	258,559	24

Number of Participants and Participation Rates by State and Region of Residence.

The previous section looked at participation in marine recreation by where the activity took place. Here we look at where the participants reside.

The top five states, in terms of the number of participants from the states who participate in marine recreation, are California, Florida, Texas, New York and Pennsylvania. The top five are all coastal states, i.e. have portions of the state that border tidally influenced waters. Pennsylvania has several counties bordering tidally influenced portions of the Delaware River.

Distance to access marine waters is a main factor in determining participation in marine recreation. Both participation rates and the total number of participants by census region and division lend support to this position. The Midwest region has no access to marine waters and has the lowest participation rate and the total number of participants among the four census regions. In addition, the census divisions with either no marine water access or more limited marine water access have relatively lower participation rates.

Number of Participants by State of Residence (Top 5)

State	Number of Participants (millions)	Percent of Marine Recreation Participants	Rank
California	12.185	5.91	1
Florida	5.835	2.83	2
Texas	5.649	2.74	3
New York	5.340	2.59	4
Pennsylvania	3.629	1.72	5

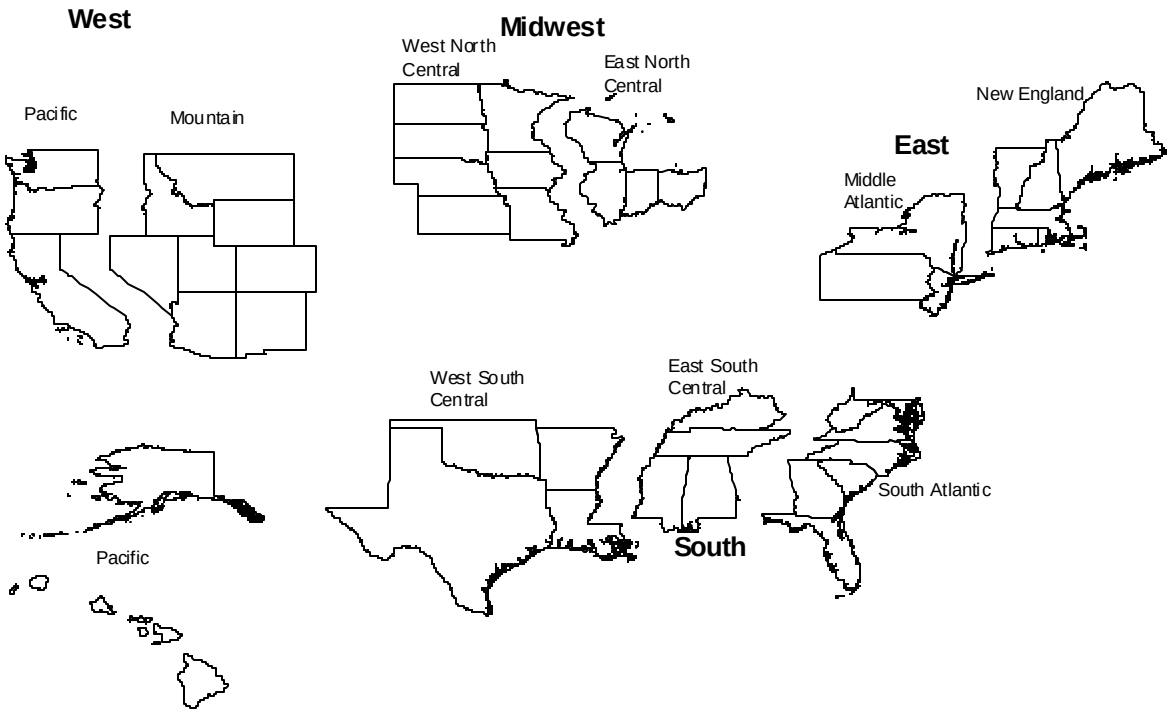
Number and Percent of Population that Participates in Marine Recreation by Region of Residence

Region	Number of Participants (millions)	Percent of Marine Recreation Participants	Percent of Region Population that Participates
East	20.8	23.24	54.85
South	34.8	38.97	47.22
Midwest	10.6	11.90	23.30
West	23.1	25.89	47.08
U.S.	89.3	100.00	43.30

Participation in Marine Recreation by Census Divisions of Residence

Census Division	Number of Participants (millions)	Percent of Marine Recreation Participants	Percent of Division Population That Participates
New England	8.5	9.47	64.87
Middle Atlantic	12.3	13.77	49.59
South Atlantic	21.1	23.61	58.29
East S. Central	4.9	5.55	35.13
West S. Central	8.9	9.82	37.42
East N. Central	7.1	7.97	25.30
West N. Central	3.5	3.93	20.08
Mountain	4.6	5.17	26.04
Pacific	18.5	20.71	58.98
U.S.	89.3	100.00	43.30

Census Regions and Divisions



Comparison of Socioeconomic Profiles of Participants vs. Non-participants in Marine Recreation

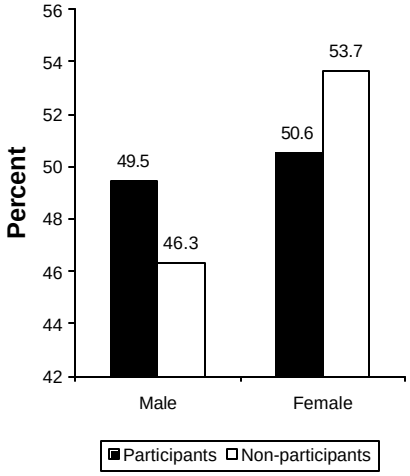
A comparison of participants versus non participants in marine recreation is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include sex, race/ethnicity, age, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes counties from coastal definition).

Multivariate probit and logit equations were estimated relating these factors to the decision to participate in marine recreation. We found that all the factors presented here are statistically significant in explaining participation in marine recreation. These results will be published in future reports and possibly used in future efforts to forecast participation in marine recreation.

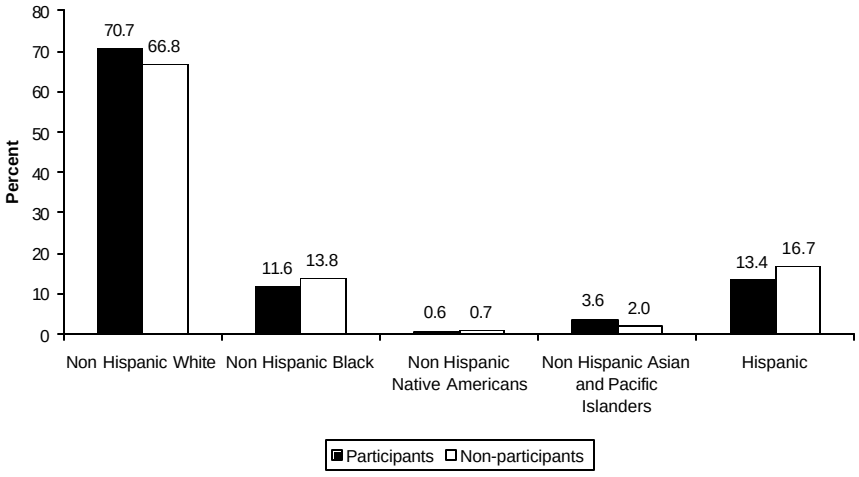
Place of residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use value of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Here we follow-up with greater specificity than state, census region or census division. Here we look at urban versus rural palace of residence and residence in a coastal county.

Coastal County residents are more likely to participate in marine recreation as the travel cost models would predict. Residents of urban areas were also more likely to participate in marine recreation even though urban places are not necessarily closer to marine waters.

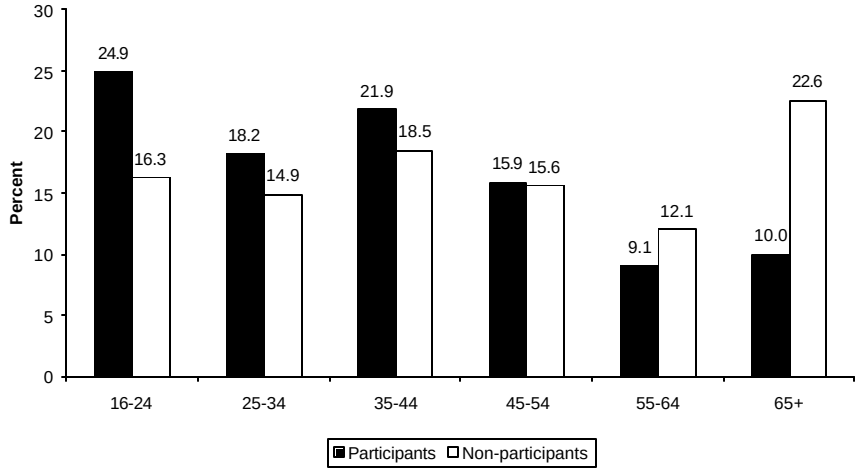
Sex *Participants in marine recreation are comprised of a higher proportion of males than non-participants.*



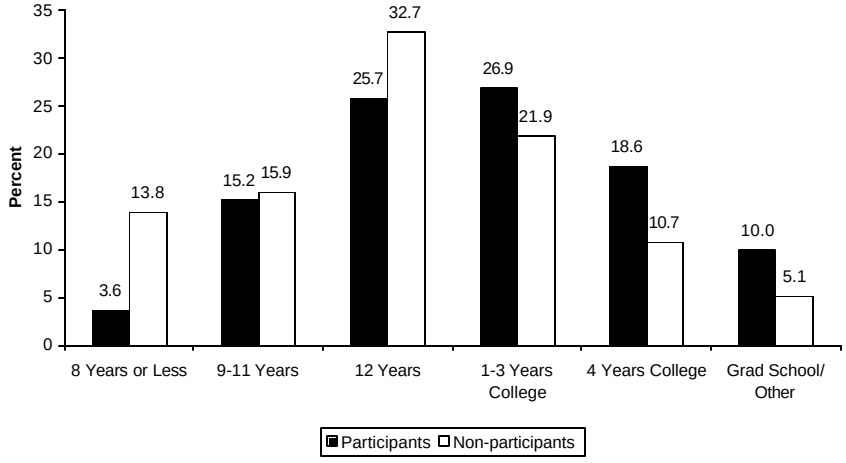
Race *Participants in marine recreation are comprised of a higher proportion of non-Hispanic whites and Asian/Pacific Islanders.*



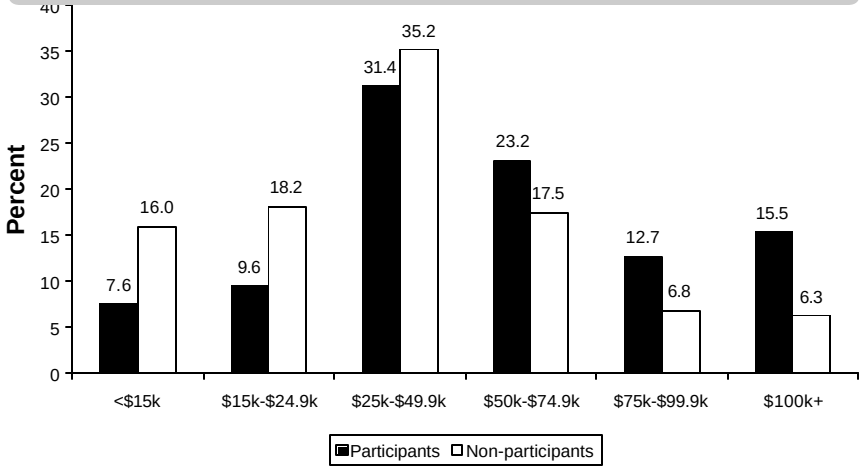
Age *Participants in marine recreation are younger than non-participants*



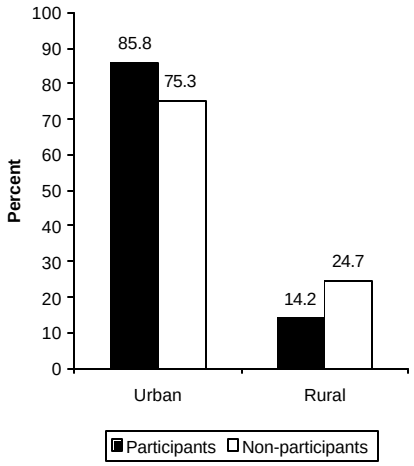
Education *Participants in marine recreation are better educated than non-participants.*



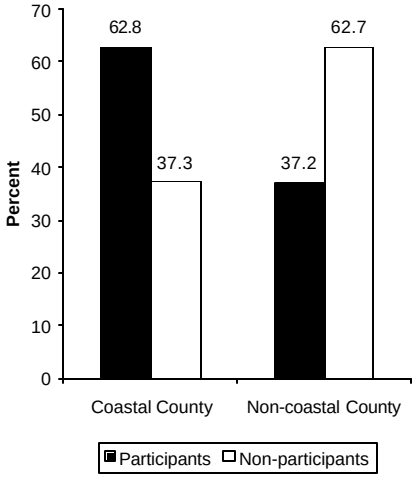
Household Income *Participants in marine recreation have a higher household income than non-participants.*



Urban/Rural Residence *Participants in marine recreation are more likely to live in an urban place of residence.*



Residnece in Coastal County *Participants in marine recreation are more likely to live in a coastal county.*

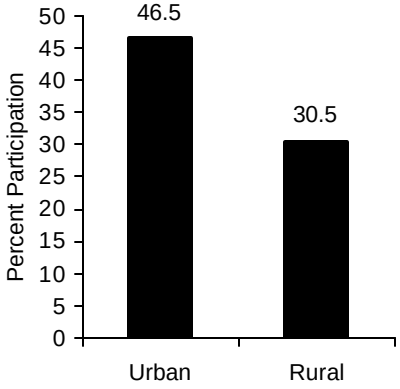


Socioeconomic Factors and Participation Rates in Marine Recreation.

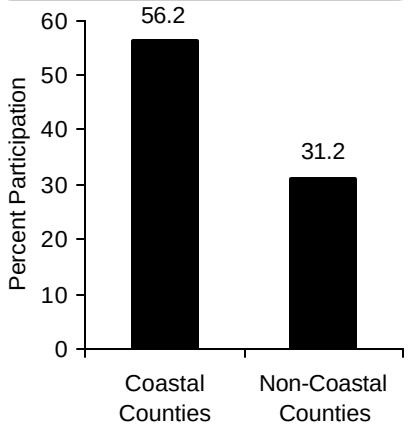
As mentioned in the previous section, our multivariate tests revealed several socioeconomic factors as statistically significant in explaining the decision to participate in marine recreation. Here we present bar charts for each of these socioeconomic factors. The difference here is that participation rates for each factor are displayed. The relationships shown here between socioeconomic factors and participation rates were confirmed by the multivariate tests which control for other factors.

Not all the relationships when here for marine recreation in general hold for each of the 19 activities/settings included in the participation models of the NSRE 2000. In the sections that follow, these results are presented for each activity/setting.

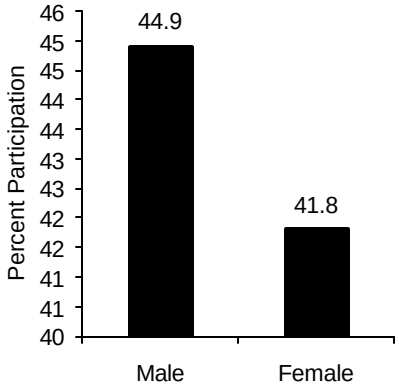
Urban/Rural Residence *Those that live in urban areas have a higher participation rate in marine recreation than those that live in rural areas.*



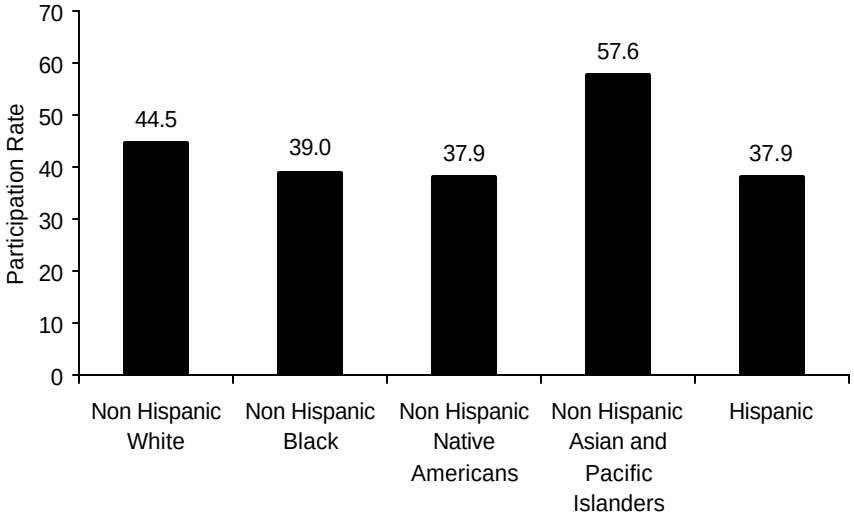
Residence in Coastal Counties *Those that live in coastal counties have a higher participation rate in marine recreation than those that live in non-coastal counties*



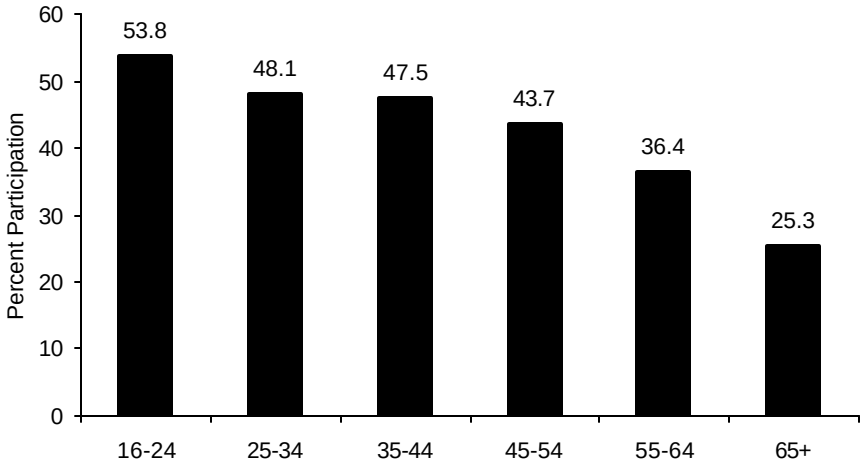
Sex *Males have slightly higher participation rates in marine recreation than females.*



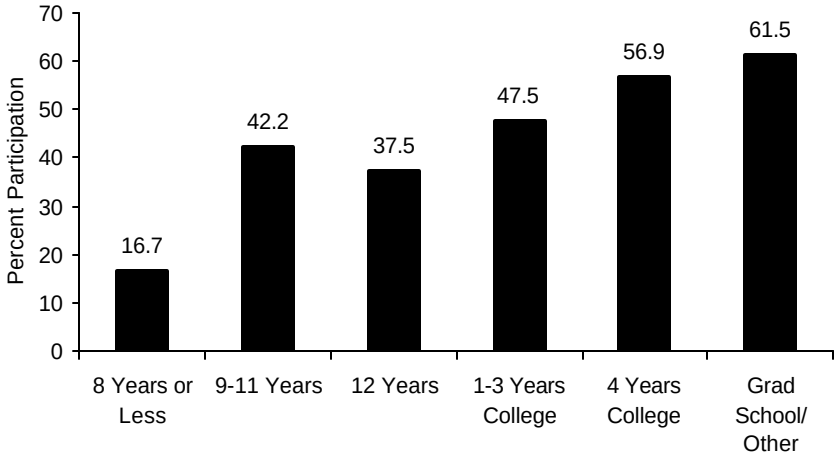
Race/Ethnicity *Non-hispanic Asians and Pacific Islanders and non-Hispanic whites have higher participation rates in marine recreation than other racial/ethnic groups.*



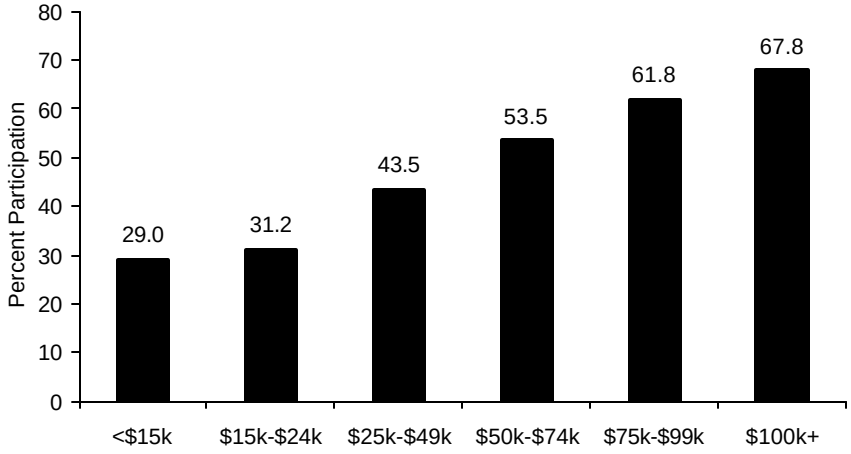
Age *As age increases, participation in marine recreation declines.*



Education *As education level increases so does participation in marine recreation.*



Household Income *As household Income increases so does participation*



Beach Visitation

Beach Visitation was one of the settings versus outdoor recreation activities included in the participation module of the NSRE 2000. As a setting, people can engage in multiple outdoor recreation activities at a beach on a given day. They swim, sunbath, collect seashells, walk, jog, view birds or other wildlife or any number of other activities, so users of the information are cautioned about adding beach visitation numbers to other activity numbers (see Introduction on the issue of double-counting).

Participants and Days. In 1999-2000, over 30 percent of the civilian non institutionalized population 16 years and older visited a saltwater beach in the U.S. This translated into an estimated 61.9 million participants, who undertook an estimated 853 million days of beach visitation (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 745.5 million days and the high estimate was 929.5 million days. For beaches adjacent to any type of water, there were over 82 million participants that spent over 1.1 billion days at the beach. Marine or saltwater beaches accounted for over 75 percent of both participants and days of beach visitation.

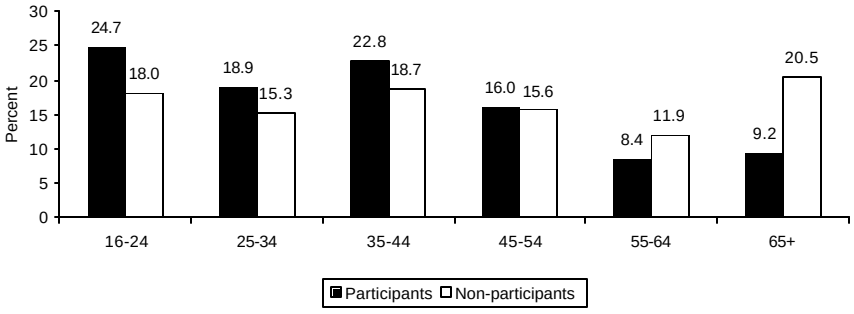
The top five states, in terms of number of participants, were Florida, California, South Carolina, New Jersey and Texas. In terms of days of beach visitation, the top five states were Florida, California, Hawaii, New Jersey and Texas.

Socioeconomic Profiles. A comparison of participants versus non participants in beach visitation is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county

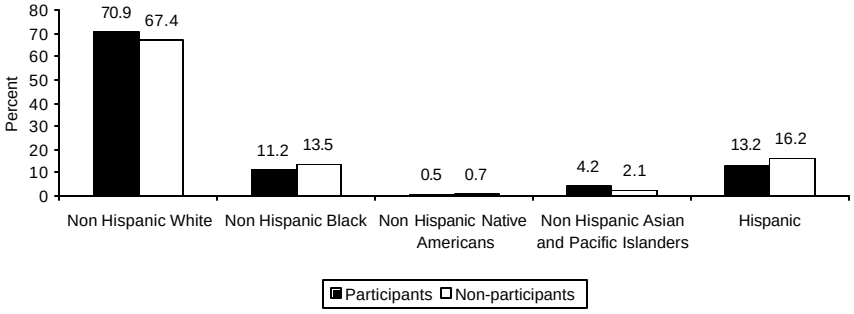
Beach Visitation by State in Which Beach is Located

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.61	1.249	11.842
Alaska	0.22	0.453	7.766
California	6.11	12.598	151.429
Connecticut	0.54	1.103	14.065
Delaware	0.61	1.257	12.877
District of Columbia	0.01	0.014	*
Florida	7.39	15.246	177.153
Georgia	0.49	1.005	8.483
Hawaii	1.75	3.598	101.149
Louisiana	0.30	0.629	4.042
Maine	1.01	2.074	16.159
Maryland	1.23	2.530	18.696
Massachusetts	1.35	2.779	28.681
Mississippi	0.51	1.042	8.679
New Hampshire	0.53	1.083	8.126
New Jersey	1.92	3.965	40.881
New York	1.44	2.964	29.225
North Carolina	1.55	3.185	27.936
Oregon	1.01	2.077	13.789
Rhode Island	0.69	1.427	17.865
South Carolina	2.15	4.434	33.302
Texas	1.87	3.851	35.239
Virginia	1.13	2.329	18.749
Washington	0.98	2.016	19.309
All States	30.03	61.922	853.288

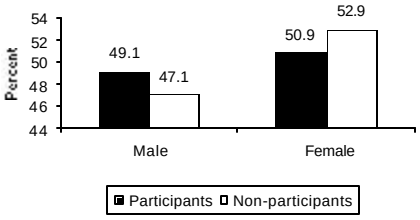
Age *Participants in visiting beaches are younger than non-participants*



Race/Ethnicity *Compared to non-participants, those participating in visiting beaches are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*



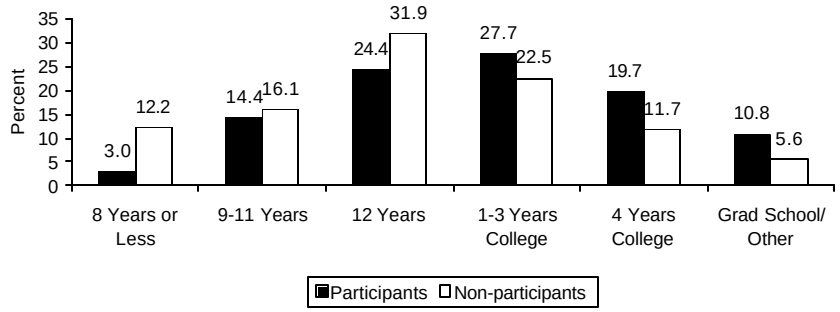
Sex *Participants in visiting beaches are comprised of a higher proportion of females, but males have a higher participation rate.*



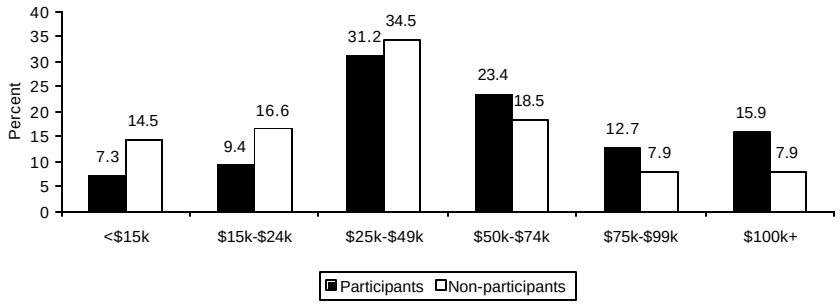
(excluding Great Lakes). We found that each of these factors are statistically significant in explaining participation in beach visitation. Multivariate probit and logit equations were estimated relating these factors to the decision to participate in beach visitation. Although the results of these equations will not be presented here, they will be used in future research efforts to forecast future participation. The important point here is that each of the differences between participants and non participants displayed in the bar charts are statistically significant differences.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to visit saltwater beaches, as these models would predict. The top five states, in terms of where people live and number from those states that visit beaches, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater beaches have the lowest number of participants.

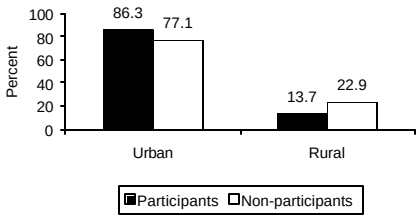
Education *Participants in visiting beaches are more educated than non-participants.*



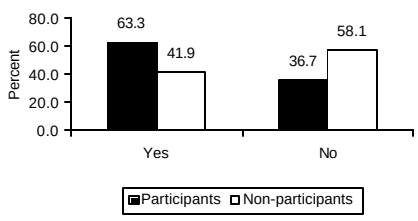
Household Income *Those participating in visiting beaches have a higher household income than those not participating.*



Urban/Rural *Participants in visiting beaches are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**13.9**	**13.1**
New England	5.6	14.8
Middle Atlantic	8.3	11.8
South	**23.8**	**13.0**
South Atlantic	14.7	15.0
East South Central	3.5	10.5
West South Central	5.7	9.4
Midwest	**7.0**	**9.5**
East North Central	4.6	9.9
West North Central	2.3	8.5
West	**17.2**	**17.2**
Mountain	3.2	7.8
Pacific	14.0	19.6
Total	**61.9**	**13.8**

Top 5 States Place of Residence

State	Participants (millions)
1. California	9.092
2. Florida	4.309
3.Texas	3.938
4. New Jersey	2.392
5. Pennsylvania	2.350

Visiting Watersides Besides Beaches

Like beach visitation, visiting watersides besides beaches is a setting as opposed to an outdoor recreation activity. As a setting, people can engage in multiple outdoor recreation activities at a waterside on a given day. They swim, sunbath, walk, jog, view birds or other wildlife or any number of other activities, so users of the information are cautioned about adding waterside visitation numbers to other activity numbers (see Introduction on the issue of double-counting).

Participants and Days. In 1999-2000, 4.5 percent of the civilian non institutionalized population 16 years and older visited a saltwater waterside besides beaches in the U.S. This translated into an estimated 9.3 million participants, who undertook an estimated 158 million days of waterside visitation besides beaches (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 136.4 million days and the high estimate was 175.7 million days. For watersides adjacent to any type of water, there were just under 56 million participants who spent 800 million days at the waterside. Marine or saltwater watersides accounted for over 16 percent of participants and over 19 percent of days of waterside visitation besides beaches.

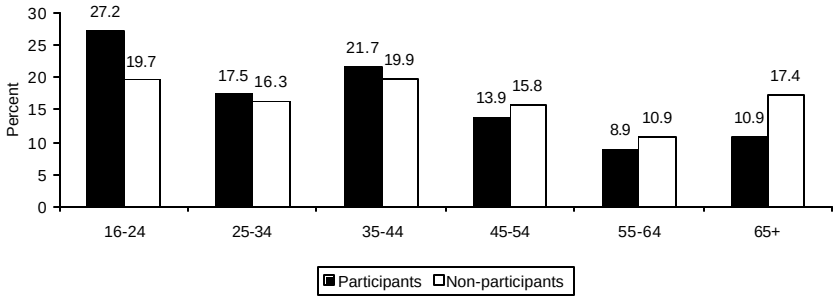
The top five states, in terms of number of participants, were Florida, California, New York, Texas and Virginia. In terms of days of waterside visitation, the top five states were Florida, California, Virginia, Louisiana and Maryland.

Socioeconomic Profiles. A comparison of participants versus non participants in waterside visitation is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural

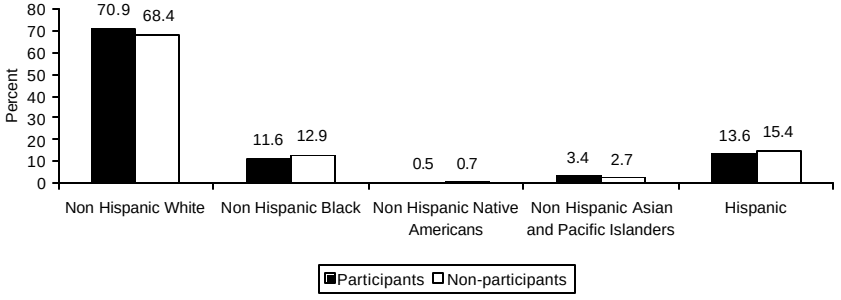
Visiting Watersides Besides Beaches by State in Which Waterside is Located

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.15	0.310	3.650
Alaska	0.09	0.193	5.441
California	0.73	1.501	20.683
Connecticut	0.09	0.178	2.408
Delaware	0.04	0.075	*
District of Columbia	0.01	0.027	*
Florida	0.87	1.801	22.590
Georgia	0.12	0.253	4.115
Hawaii	0.17	0.347	3.781
Louisiana	0.16	0.331	7.050
Maine	0.22	0.455	4.300
Maryland	0.23	0.471	5.894
Massachusetts	0.17	0.353	2.925
Mississippi	0.08	0.164	1.317
New Hampshire	0.09	0.192	1.985
New Jersey	0.22	0.453	4.575
New York	0.27	0.561	3.743
North Carolina	0.21	0.442	4.164
Oregon	0.14	0.293	2.309
Rhode Island	0.13	0.273	3.310
South Carolina	0.18	0.369	2.811
Texas	0.24	0.488	3.975
Virginia	0.23	0.484	8.274
Washington	0.21	0.439	4.236
All States	4.50	9.270	158.419

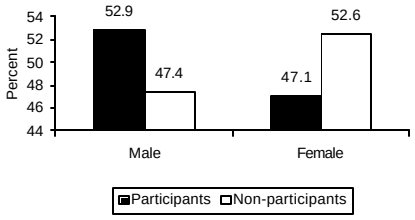
Age *Participants in visiting watersides besides beaches are younger than non-participants*



Race/Ethnicity *Compared to non-participants, those participating in visiting watersides besides beaches are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*



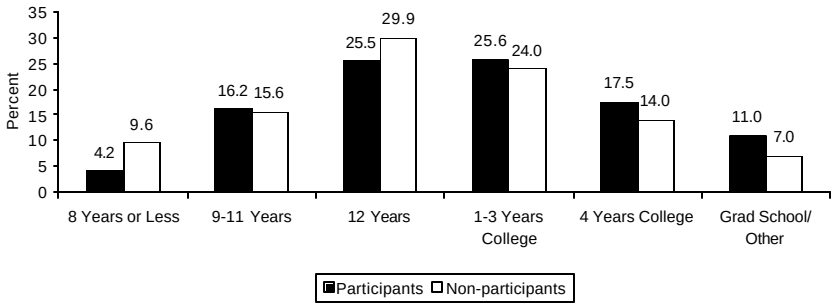
Sex *Those who visited watersides besides beaches are comprised of a higher proportion of males, and males have a higher participation rate.*



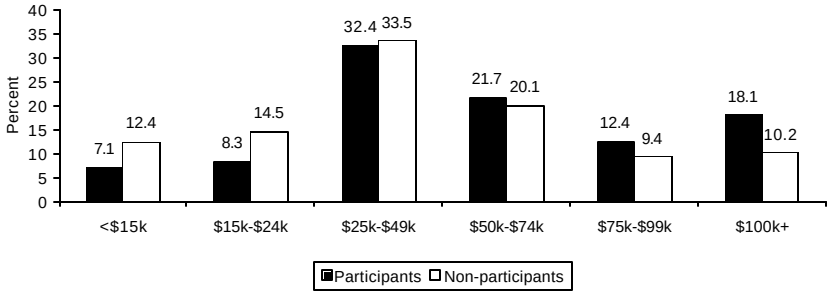
place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in visiting watersides besides beaches. We found that all of these factors are statistically significant in explaining participation except for race and urban/rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in swimming, as these models would predict. The top five states, in terms of where people live and number from those states that visit watersides besides beaches, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater watersides have the lowest number of participants.

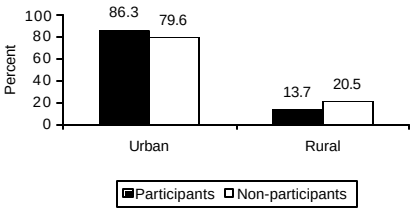
Education *Participants in visiting watersides besides beaches are slightly more educated than non-participants.*



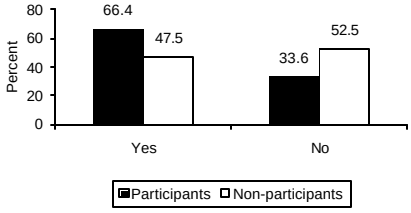
Household Income *Those participating in visiting watersides besides beaches have a higher household income than those not participating.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**2.2**	**13.1**
New England	0.9	15.6
Middle Atlantic	1.3	11.0
South	**3.7**	**20.2**
South Atlantic	2.2	22.3
East South Central	0.5	16.3
West South Central	0.9	16.4
Midwest	**1.1**	**11.3**
East North Central	0.7	9.0
West North Central	0.4	15.4
West	**2.3**	**18.4**
Mountain	0.5	14.8
Pacific	1.9	19.3
Total	**9.3**	**17.1**

Top 5 States Place of Residence

State	Participants (millions)
1. California	1.113
2. Florida	0.783
3. New York	0.577
4. Texas	0.515
5. Pennsylvania	0.371

Swimming

Swimming was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to swimming in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over 25 percent of the civilian non institutionalized population 16 years and older participated in swimming in the U.S. This translated into an estimated 52.6 million participants, who undertook an estimated 750 million days of swimming (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 705.3 million days and the high estimate was 775.3 million days. For swimming in any type of water, there were over 89 million participants that spent over 1.3 billion days participating in swimming. Marine or saltwater swimming accounted for over 59 percent of participants and over 55 percent of days.

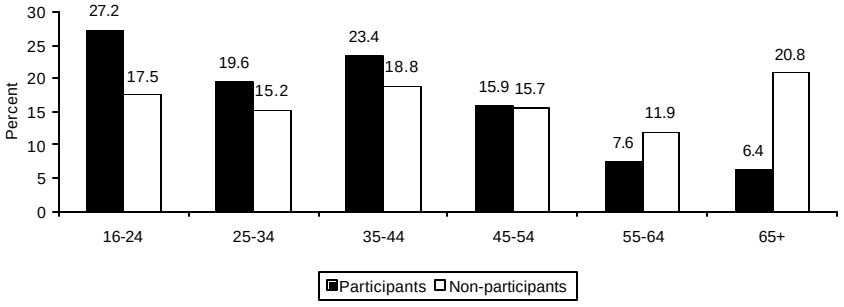
The top five states, in terms of number of participants, were Florida, California, New Jersey, South Carolina and Hawaii. In terms of days of participation in swimming, the top five states were Florida, California, Hawaii, New Jersey and Massachusetts.

Socioeconomic Profiles. A comparison of participants versus non participants in swimming is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in swimming. We found that all of these factors are statistically significant in explaining participation in swimming.

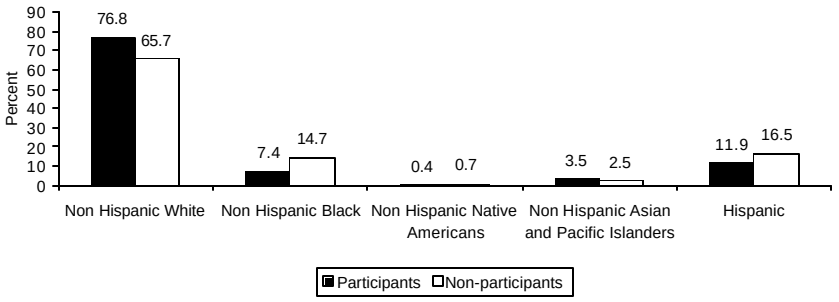
Swimming by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.50	1.022	8.203
Alaska	0.05	0.108	0.897
California	4.07	8.399	94.573
Connecticut	0.51	1.058	12.774
Delaware	0.48	0.985	9.765
District of Columbia	0.01	0.010	*
Florida	6.81	14.033	161.098
Georgia	0.42	0.861	9.678
Hawaii	1.63	3.369	92.708
Louisiana	0.19	0.398	4.590
Maine	0.80	1.640	13.513
Maryland	1.05	2.169	18.351
Massachusetts	1.33	2.739	31.660
Mississippi	0.27	0.563	6.739
New Hampshire	0.46	0.949	8.374
New Jersey	1.85	3.804	37.433
New York	1.16	2.390	28.972
North Carolina	1.56	3.218	27.479
Oregon	0.31	0.643	5.161
Rhode Island	0.76	1.564	19.680
South Carolina	1.84	3.797	29.239
Texas	1.49	3.076	29.590
Virginia	0.83	1.701	15.481
Washington	0.34	0.698	4.890
All States	25.53	52.637	750.083

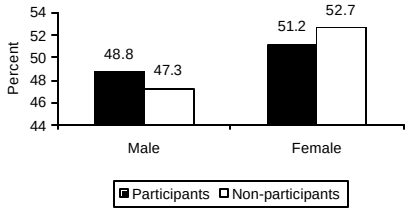
Age *Participants in swimming are younger than non-participants.*



Race/Ethnicity *Compared to non-participants, those participating in swimming are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*

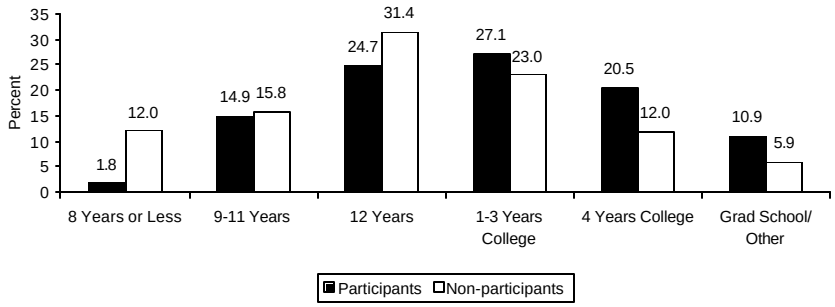


Sex *Those who participated in swimming are comprised of a higher proportion of females, but males have a higher participation rate.*

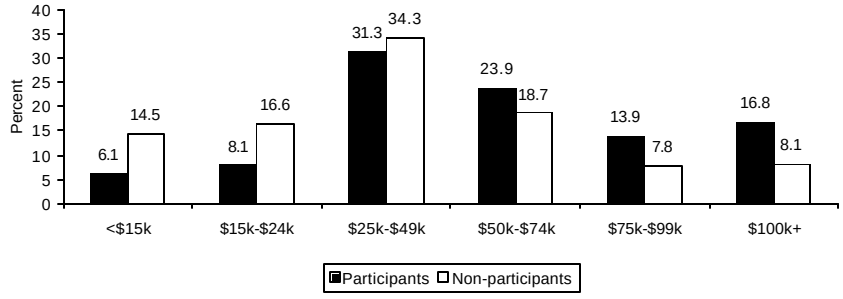


Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to visit saltwater watersides, as these models would predict. The top five states, in terms of where people live and number from those states that participate in swimming, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of swimming participants.

Education *Participants in swimming are more educated than non-participants.*



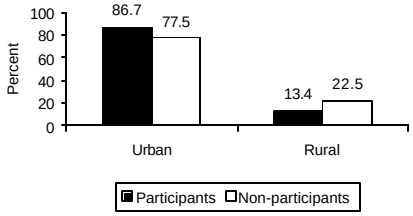
Household Income *Those participating in swimming have a higher household income than those not participating.*



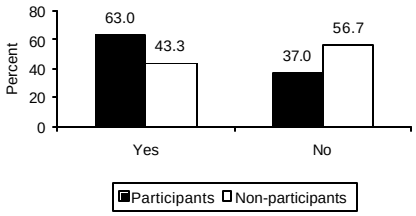
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**13.8**	**13.6**
New England	5.9	14.9
Middle Atlantic	7.9	12.4
South	**20.9**	**13.4**
South Atlantic	13.3	14.7
East South Central	3.0	11.1
West South Central	4.6	10.9
Midwest	**6.4**	**11.4**
East North Central	4.5	11.2
West North Central	2.0	11.9
West	**11.6**	**18.1**
Mountain	2.5	9.2
Pacific	9.1	20.6
Total	**52.7**	**14.2**

Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	6.103
2. Florida	3.979
3. New York	3.237
4. Texas	3.216
5. New Jersey	2.350

Snorkeling

Snorkeling was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to snorkeling in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, just over 5 percent of the civilian non institutionalized population 16 years and older participated in snorkeling in the U.S. This translated into an estimated 10.5 million participants, who undertook an estimated 92 million days of snorkeling (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 86.8 million days and the high estimate was 94.5 million days. For snorkeling in any type of water, there were over 13 million participants that spent over 100 million days snorkeling. Marine or saltwater snorkeling accounted for over 77 percent of participants and 91 percent of days snorkeling.

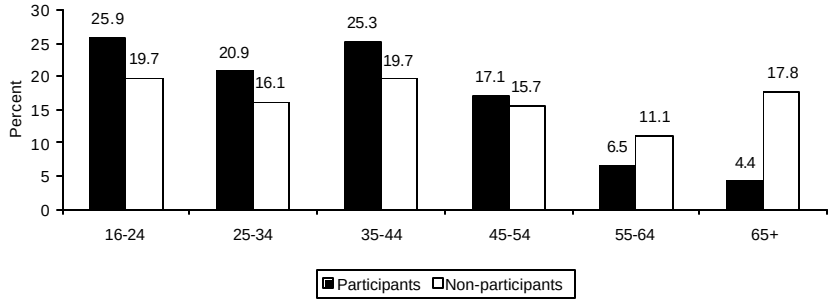
The top five states, in terms of number of participants, were Florida, Hawaii, California, Texas, and Massachusetts. In terms of days of participation the top five states could not be estimated because there was an insufficient sample size per state. States for which an estimate could be calculated included, in order of rank, Hawaii, Florida and California.

Socioeconomic Profiles. A comparison of participants versus non participants in snorkeling is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in beach visitation. We found that each of

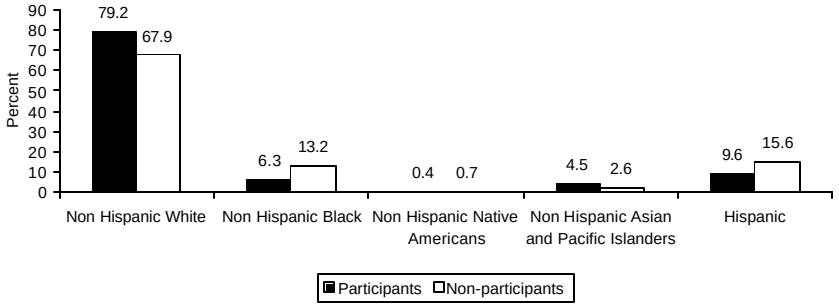
Snorkeling by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.05	0.107	*
Alaska	0.01	0.028	*
California	0.34	0.707	3.818
Connecticut	0.03	0.062	*
Delaware	0.01	0.021	*
District of Columbia	0.00	0.000	0.000
Florida	1.39	2.866	23.956
Georgia	0.01	0.021	*
Hawaii	1.06	2.194	24.158
Louisiana	0.01	0.016	*
Maine	0.02	0.045	*
Maryland	0.01	0.020	*
Massachusetts	0.07	0.136	*
Mississippi	0.01	0.025	*
New Hampshire	0.00	0.010	*
New Jersey	0.05	0.110	*
New York	0.06	0.115	*
North Carolina	0.04	0.084	*
Oregon	0.02	0.039	*
Rhode Island	0.06	0.126	*
South Carolina	0.06	0.128	*
Texas	0.08	0.165	*
Virginia	0.03	0.064	*
Washington	0.02	0.051	*
All States	5.07	10.460	92.463

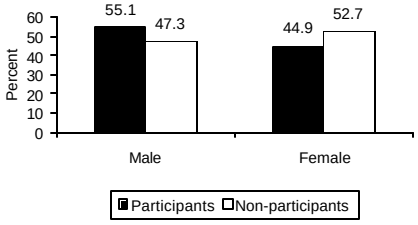
Age *Participants in snorkeling are younger than non-participants.*



Race/Ethnicity *Compared to non-participants, those participating in snorkeling are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*



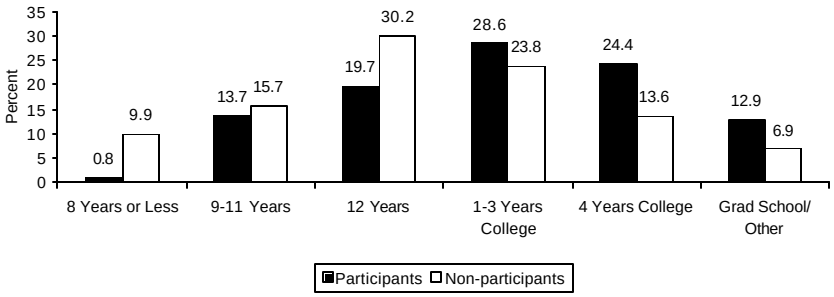
Sex *Those who participated in snorkeling are comprised of a higher proportion of males, and males have a higher participation rate.*



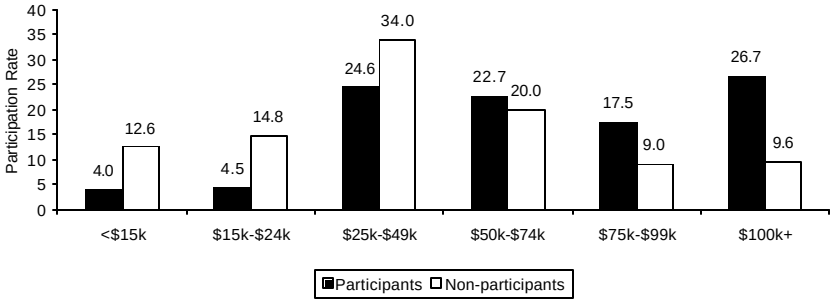
these factors are statistically significant in explaining participation in snorkeling. Although the results of these equations will not be presented here, they will be used in future research efforts to forecast future participation. The important point here is that each of the differences between participants and non participants displayed in the bar charts are statistically significant differences.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in snorkeling, as these models would predict. The top five states, in terms of where people live and number from those states that participate in snorkeling, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Participants in snorkeling are more educated than non-participants.*



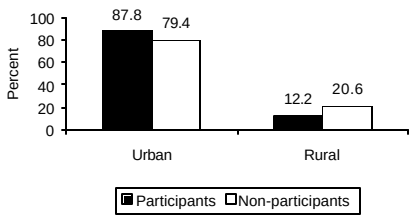
Household Income *Those participating in snorkeling have a higher household income than those not participating.*



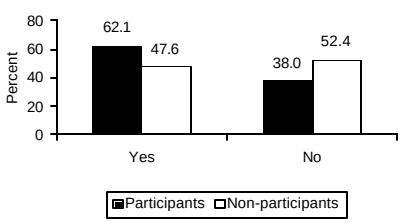
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**2.1**	**6.2**
New England	0.9	7.4
Middle Atlantic	1.2	5.0
South	**3.5**	**8.6**
South Atlantic	2.2	10.0
East South Central	0.5	4.9
West South Central	0.8	7.0
Midwest	**1.8**	**7.6**
East North Central	1.2	6.9
West North Central	0.6	8.9
West	**3.1**	**10.7**
Mountain	0.7	4.2
Pacific	2.4	12.0
Total	**10.4**	**8.8**

Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	1.340
2. Florida	1.051
3. Hawaii	0.660
4. New York	0.536
5. Texas	0.433

Scuba Diving

Scuba diving was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to scuba diving in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over 1.35 percent of the civilian non institutionalized population 16 years and older participated in scuba diving in the U.S. This translated into an estimated 2.8 million participants, who undertook an estimated 23 million days of scuba diving (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 21.1 million days and the high estimate was 23.1 million days. For scuba diving in any type of water, there were over 3.7 million participants that spent over 33 million days scuba diving. Marine or saltwater scuba diving accounted for over 74 percent of participants and over 67 percent days scuba diving.

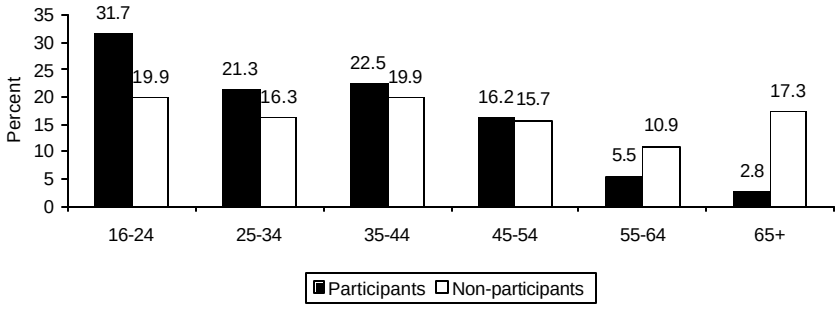
The top five states, in terms of number of participants, were Florida, Hawaii, California, Washington, and Texas. In terms of days of participation the top five states could not be estimated because there was an insufficient sample size per state. States for which an estimate could be calculated included, in order of rank, Florida Hawaii, and California.

Socioeconomic Profiles. A comparison of participants versus non participants in scuba diving is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in scuba diving. We found that all of these

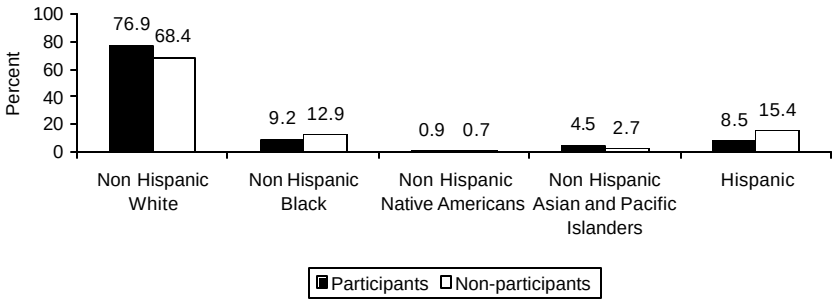
Scuba Diving by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.01	0.018	*
Alaska	0.01	0.016	*
California	0.14	0.288	1.383
Connecticut	0.01	0.010	*
Delaware	0.01	0.011	*
District of Columbia	0.00	0.000	0.000
Florida	0.39	0.802	5.420
Georgia	0.01	0.014	*
Hawaii	0.20	0.422	4.251
Louisiana	0.01	0.011	*
Maine	0.01	0.022	*
Maryland	0.01	0.027	*
Massachusetts	0.02	0.045	*
Mississippi	0.00	0.004	*
New Hampshire	0.01	0.011	*
New Jersey	0.02	0.047	*
New York	0.03	0.059	*
North Carolina	0.02	0.039	*
Oregon	0.01	0.010	*
Rhode Island	0.01	0.024	*
South Carolina	0.02	0.050	*
Texas	0.03	0.070	*
Virginia	0.03	0.053	*
Washington	0.04	0.073	*
All States	1.35	2.786	22.819

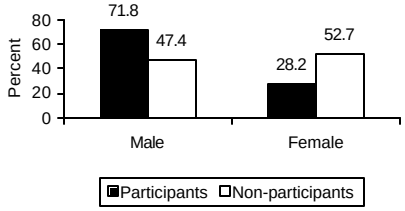
Age *Participants in scuba diving are younger than non-participants.*



Race/Ethnicity *Compared to non-participants, those participating in scuba diving are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*



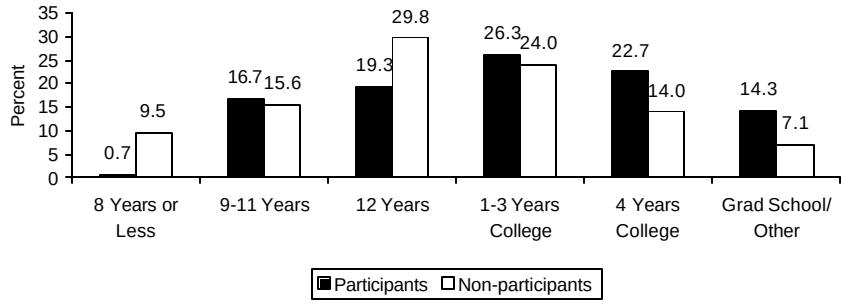
Sex *Those who participated in scuba diving are comprised of a higher proportion of males and males have a higher participation rate.*



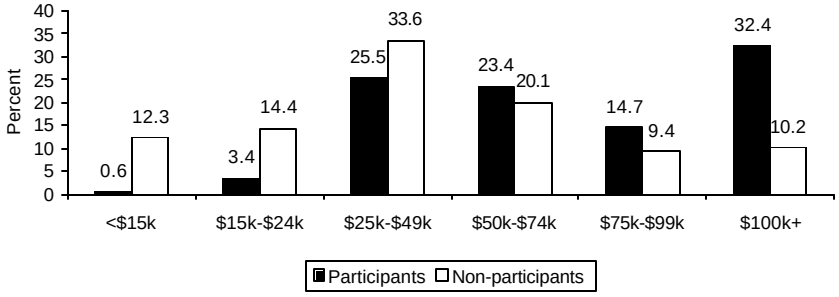
factors are statistically significant in explaining participation in scuba diving except race and urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in scuba diving, as these models would predict. The top five states, in terms of where people live and number from those states that scuba dive, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region. The Midwest had the lowest number of participants. For most Census divisions, sample sizes were insufficient for estimating days of scuba diving.

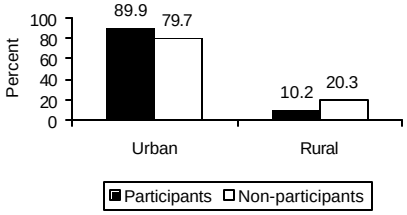
Education *Participants in scuba diving are more educated than non-participants.*



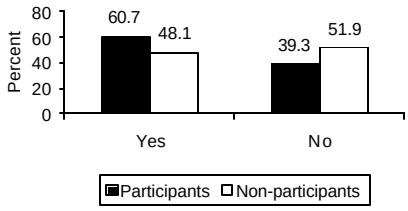
Household Income *Those participating in scuba diving have a higher household income than those not participating and have an especially higher proportion in the highest income category.*



Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**0.5**	**6.5**
New England	0.2	*
Middle Atlantic	0.3	*
South	**1.0**	**8.7**
South Atlantic	0.6	9.1
East South Central	0.1	*
West South Central	0.2	*
Midwest	**0.4**	**5.7**
East North Central	0.2	*
West North Central	0.2	*
West	**0.9**	**8.9**
Mountain	0.2	*
Pacific	0.7	9.7
Total	**2.8**	**8.2**

Top 5 States Place of Residence

State	Participants (millions)
1. California	0.371
2. Florida	0.309
3. New York	0.165
4. Hawaii	0.144
5. Texas	0.124

Surfing

Surfing was one of the outdoor recreation activities included in the participation module of the NSRE 2000. Since surfing is strictly a salt-water activity, there was no fresh water component to surfing in the NSRE 2000.

Participants and Days. In 1999-2000, 1.6 percent of the civilian non institutionalized population 16 years and older participated in surfing in the U.S. This translated into an estimated 3.3 million participants, who undertook an estimated 76 million days of surfing (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 66.5 million days and the high estimate was 83.4 million days.

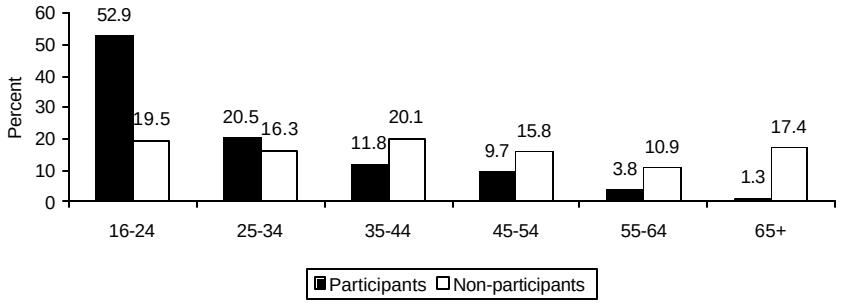
The top five states, in terms of number of participants, were California, Hawaii, Florida, North Carolina and New Jersey. In terms of days of participation the top five states could not be estimated because there was an insufficient sample size per state. States for which an estimate could be calculated included, in order of rank, Hawaii, California, Florida, and North Carolina.

Socioeconomic Profiles. A comparison of participants versus non participants in surfing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in surfing. We found that each of these factors are statistically significant in explaining participation in surfing, except race and urban or rural place of residence. Although there appear to be significant differences in the bar chart comparisons, the difference for race

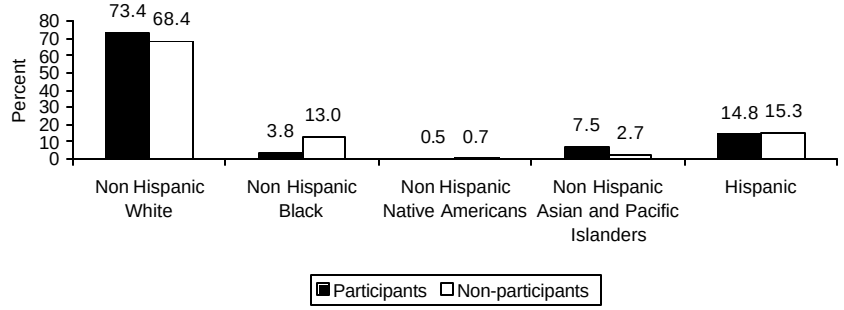
Surfing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.02	0.045	*
Alaska	0.00	0.000	0.000
California	0.54	1.114	22.633
Connecticut	0.01	0.019	0.000
Delaware	0.01	0.021	*
District of Columbia	0.00	0.000	0.000
Florida	0.28	0.583	10.257
Georgia	0.02	0.037	*
Hawaii	0.34	0.704	26.909
Louisiana	0.00	0.009	*
Maine	0.01	0.027	*
Maryland	0.01	0.029	*
Massachusetts	0.02	0.047	*
Mississippi	0.00	0.000	*
New Hampshire	0.01	0.011	*
New Jersey	0.07	0.144	*
New York	0.03	0.066	*
North Carolina	0.09	0.194	3.102
Oregon	0.00	0.007	*
Rhode Island	0.03	0.067	*
South Carolina	0.05	0.104	*
Texas	0.06	0.124	*
Virginia	0.05	0.099	*
Washington	0.01	0.016	*
All States	1.59	3.286	76.489

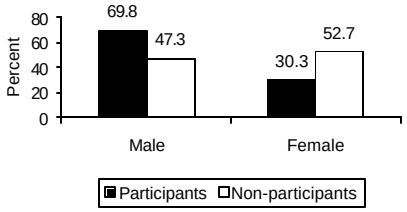
Age *Participants in surfing are younger than non-participants with an especially high proportion in the lowest age category.*



Race/Ethnicity *Compared to non-participants, those participating in surfing are comprised of a higher proportion of non-Hispanic whites and Asians/Pacific Islanders.*



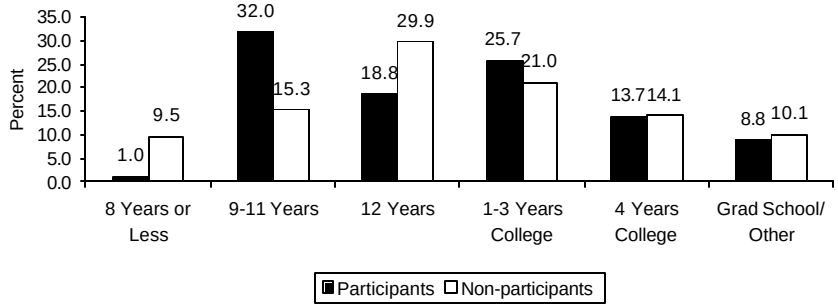
Sex *Those who participated in surfing are comprised of a higher proportion of males.*



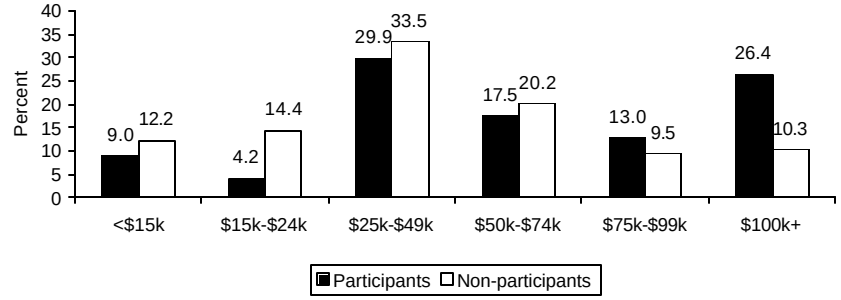
and urban or rural place of residence were not signficant, holding other factors constant.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in surfing, as these models would predict. The top five states, in terms of where people live and number from those states that visit beaches, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region. The Midwest had the lowest number of participants and fewest days per participant among the four regions. For several Census Divisions, sample sizes were insufficient to estimate days of surfing.

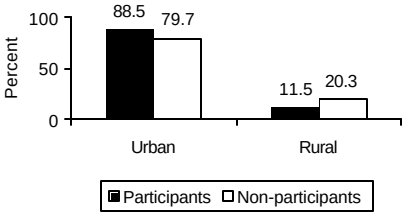
Education *Participants in surfing are comprised of a higher proportion of those who completed some high school or some college but a lower proportion of those who completed four hears of high school or college or went to graduate/professional school.*



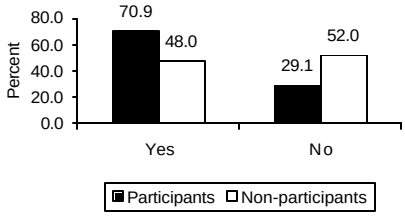
Household Income *Those participating in surfing are comprised of a higher proportion of those in the two highest household income categories.*



Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**0.43**	**14.1**
New England	0.19	10.7
Middle Atlantic	0.25	16.7
South	**1.03**	**19.7**
South Atlantic	0.80	23.1
East South Central	0.04	*
West South Central	0.19	*
Midwest	**0.31**	**4.6**
East North Central	0.21	*
West North Central	0.10	*
West	**1.48**	**31.2**
Mountain	0.16	*
Pacific	1.32	33.5
Total	**3.26**	**23.3**

Top 5 States Place of Residence

State	Participants (millions)
1. California	0.742
2. Hawaii	0.474
3. Florida	0.330
4. Texas	0.144
5. Georgia	0.103

Wind surfing

Wind surfing was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to wind surfing in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, 0.4 percent of the civilian non institutionalized population 16 years and older participated in wind surfing in the U.S. This translated into an estimated 800 thousand participants, who undertook an estimated 5.8 million days of wind surfing (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). There were no respondents who stated they participated in over 200 days of wind surfing, therefore the low, medium and high estimates are the same. For wind surfing in any type of water, there were 1.7 million participants that spent over 6.2 million days wind surfing. Marine or saltwater wind surfing accounted for over 48 percent of participants and over 93 percent of days.

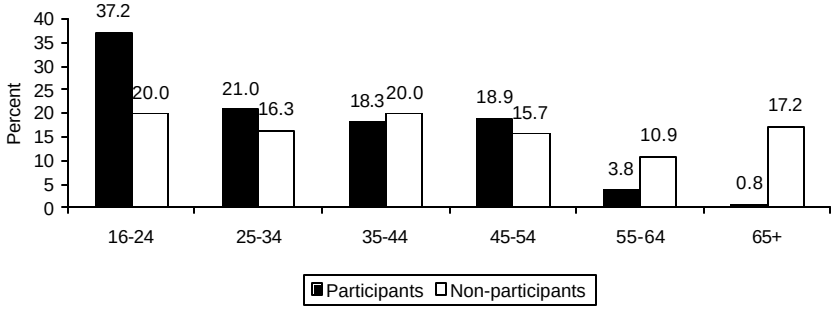
The top five states, in terms of number of participants, were Florida, Texas, Hawaii, California and New York. In terms of days of participation the top five states could not be estimated because there was an insufficient sample size per state. Estimation of days was possible for one state, Florida.

Socioeconomic Profiles. A comparison of participants versus non participants in wind surfing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in wind surfing.

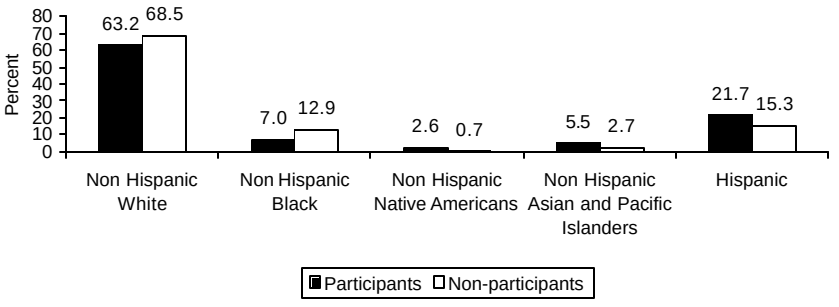
Wind Surfing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.01	0.027	*
Alaska	0.00	0.000	0.000
California	0.04	0.082	*
Connecticut	0.01	0.022	*
Delaware	0.01	0.020	*
District of Columbia	0.00	0.000	0.000
Florida	0.05	0.109	0.524
Georgia	0.00	0.000	0.000
Hawaii	0.04	0.086	*
Louisiana	0.00	0.008	*
Maine	0.01	0.020	*
Maryland	0.01	0.024	*
Massachusetts	0.02	0.049	*
Mississippi	0.00	0.008	*
New Hampshire	0.00	0.000	*
New Jersey	0.02	0.045	*
New York	0.03	0.064	*
North Carolina	0.02	0.051	*
Oregon	0.00	0.000	*
Rhode Island	0.02	0.033	*
South Carolina	0.01	0.017	*
Texas	0.05	0.101	*
Virginia	0.00	0.005	*
Washington	0.01	0.014	*
All States	0.39	0.800	5.800

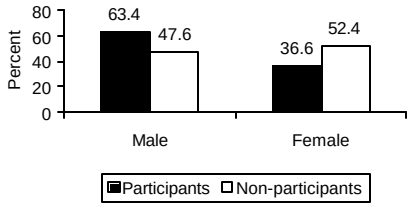
Age *Compared to non-participants, participants in wind surfing are comprised of a higher proportion of those 16-34 and 45-54 than non-participants.*



Race/Ethnicity *Compared to non-participants, those participating in windsurfing are comprised of a higher proportion of non-Hispanic native Americans, Asians/Pacific Islanders and Hispanics.*



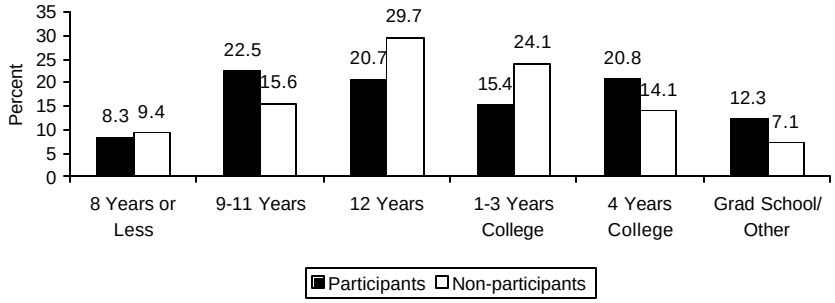
Sex *Compared to non-participatns, those who participated in wind surfing are comprised of a higher proportion of males.*



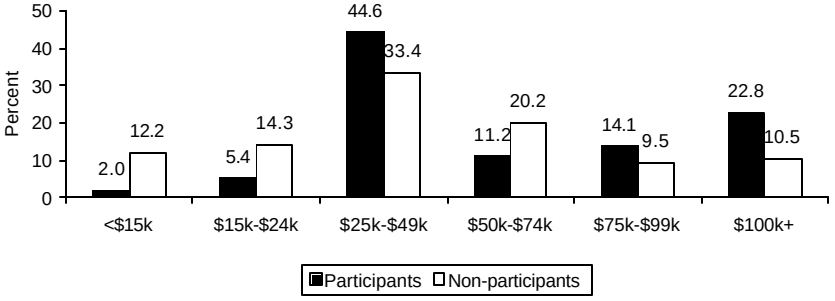
We found that each of these factors are statistically significant in explaining participation in wind surfing, except education level, race and urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in wind surfing, as these models would predict. The top five states, in terms of where people live and number from those states that visit beaches, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

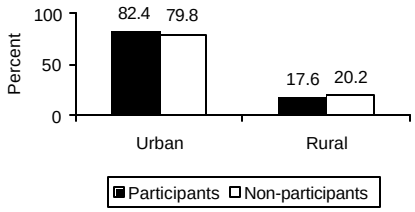
Education *Compared to non-participants, participants in wind surfing are comprised of a higher proportion of those with a college education or higher and with 9-11 years of school.*



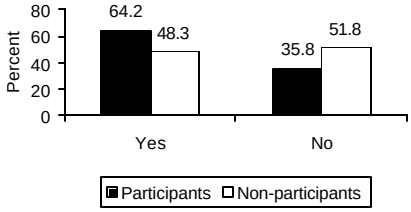
Household Income *Compared to non-participatns, participants in wind surfing are comprised of a higher proportion of those with household incomes of $75k or greater and $25k-$49k.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**0.23**	**3.6**
New England	0.08	*
Middle Atlantic	0.14	*
South	**0.31**	**4.5**
South Atlantic	0.14	5.5
East South Central	0.04	*
West South Central	0.12	*
Midwest	**0.08**	*
East North Central	0.06	*
West North Central	0.02	*
West	**0.19**	*
Mountain	0.06	*
Pacific	0.12	*
Total	**0.80**	**7.2**

Top 5 States Place of Residence

State	Participants (millions)
1. Texas	0.104
2. New York	0.103
3. California	0.062
4. Hawaii	0.041
5. Florida	0.040

Fishing

Fishing was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to fishing in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over 10 percent of the civilian non institutionalized population 16 years and older participated in fishing in the U.S. This translated into an estimated 21.3 million participants, who undertook an estimated 259 million days of fishing (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 244.3 million days and the high estimate was 268.8 million days. For fishing in any type of water, there were over 71 million participants that spent over 892 million days fishing. Marine or saltwater fishing accounted for about 30 percent of participants and about 29 percent of days.

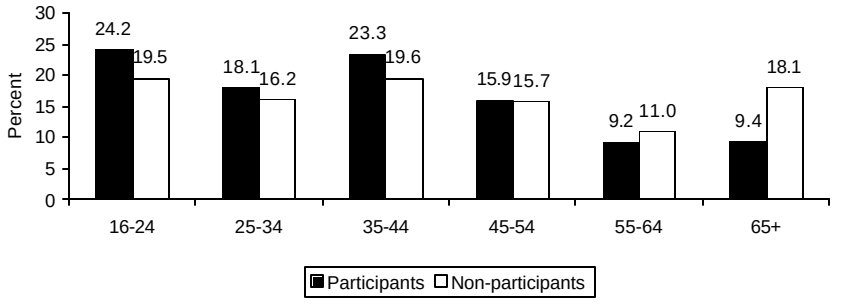
The top five states, in terms of number of participants, were Florida, Californa, Texas, New Jersey and North Carolina. In terms of days of fishing, the top five states were Florida, California, Texas, Hawaii, and New Jersey.

Socioeconomic Profiles. A comparison of participants versus non participants in fishing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in fishing. We found that each of these factors are statistically significant in explaining participation in fishing, except education level and race.

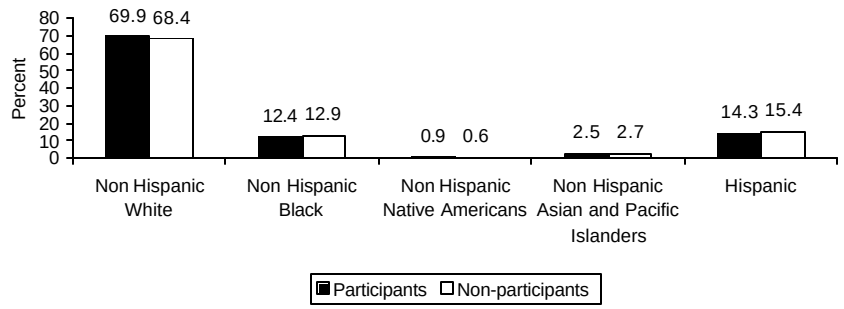
Fishing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.30	0.615	4.217
Alaska	0.33	0.684	10.588
California	1.32	2.727	20.318
Connecticut	0.23	0.480	7.792
Delaware	0.26	0.546	8.080
District of Columbia	0.03	0.066	*
Florida	2.28	4.698	56.285
Georgia	0.17	0.357	3.003
Hawaii	0.36	0.747	16.071
Louisiana	0.47	0.975	12.486
Maine	0.20	0.407	2.967
Maryland	0.49	1.017	11.060
Massachusetts	0.37	0.772	8.098
Mississippi	0.15	0.312	4.663
New Hampshire	0.12	0.255	1.918
New Jersey	0.64	1.323	14.687
New York	0.52	1.069	14.523
North Carolina	0.62	1.278	10.381
Oregon	0.16	0.340	2.780
Rhode Island	0.18	0.367	4.806
South Carolina	0.45	0.931	6.097
Texas	0.82	1.695	16.425
Virginia	0.44	0.916	7.720
Washington	0.24	0.486	4.400
All States	10.32	21.284	258.811

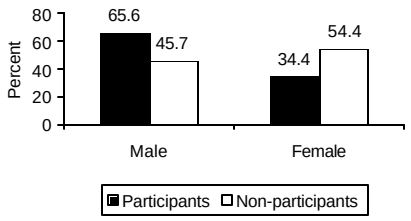
Age *Participants in fishing are slightly younger than non-participants*



Race/Ethnicity *Compared to non-participants, those participating in fishing are comprised of a Slightly higher proportion of non-Hispanic whites and non-Hispanic Native Americans.*

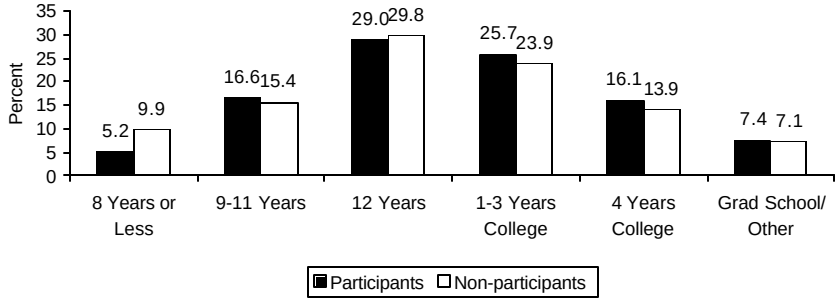


Sex *Participants in fishing are comprised of a higher proportion of males.*

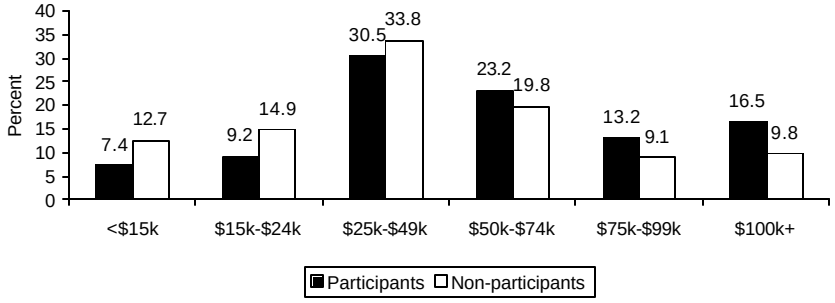


Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in fishing, as these models would predict. The top five states, in terms of where people live and number from those states that participate in fishing, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Participants in fishing are slightly more educated than non-participants.*



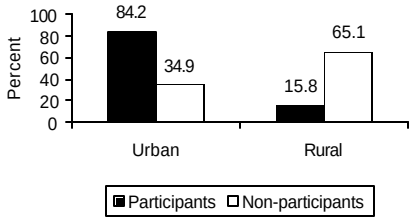
Household Income *Those participating in fishing have a higher household income than those not participating.*



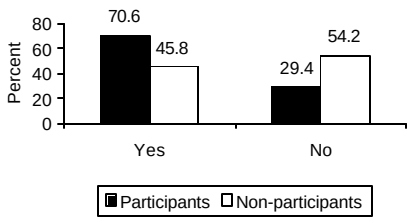
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**4.6**	**12.8**
New England	1.9	14.0
Middle Atlantic	2.7	11.9
South	**10.5**	**12.6**
South Atlantic	6.7	14.2
East South Central	1.1	8.0
West South Central	2.7	10.8
Midwest	**1.4**	**9.0**
East North Central	0.9	8.9
West North Central	0.5	9.2
West	**4.8**	**11.7**
Mountain	0.5	6.2
Pacific	4.3	12.6
Total	**21.3**	**12.2**

Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	2.515
2. Florida	2.350
3.Texas	1.670
4. New York	1.196
5. North Carolina	0.948

Motorboating

Motorboating was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to Motorboating in salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over seven percent of the civilian non institutionalized population 16 years and older participated in Motorboating in the U.S. This translated into an estimated 14.6 million participants, who undertook an estimated 202 million days of Motorboating (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 186.8 million days and the high estimate was 209.5 million days. For motorboating in any type of water, there were over 51 million participants that spent over 679 million days motorboating. Marine or saltwater motorboating accounted for about 29 percent of participants and about 30 percent of days.

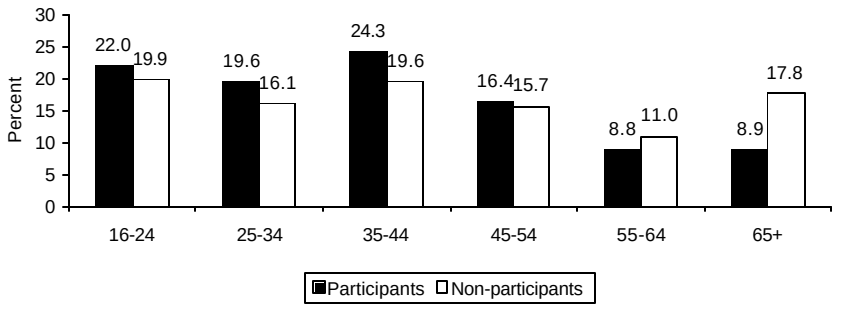
The top five states, in terms of number of participants, were Florida, California, Maryland, New York and New Jersey. In terms of days of Motorboating, the top five states were Florida, New Jersey, California, Louisiana and Texas.

Socioeconomic Profiles. A comparison of participants versus non participants in Motorboating is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Motorboating. We found that each of these factors are statistically significant in explaining participation in

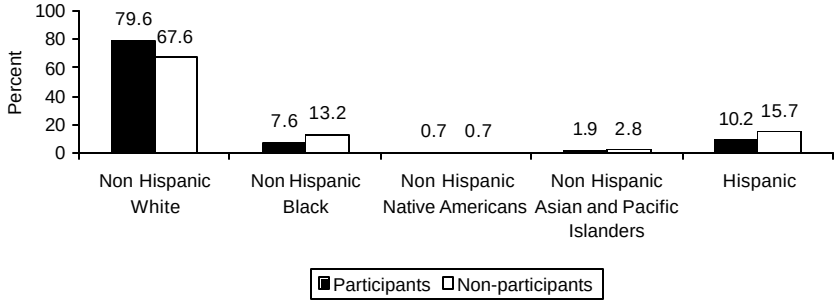
Motorboating by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.13	0.272	3.931
Alaska	0.20	0.419	6.491
California	0.75	1.549	11.589
Connecticut	0.19	0.391	6.756
Delaware	0.18	0.381	4.556
District of Columbia	0.02	0.034	*
Florida	1.62	3.337	46.624
Georgia	0.13	0.258	2.922
Hawaii	0.25	0.519	4.630
Louisiana	0.33	0.671	10.399
Maine	0.19	0.382	6.293
Maryland	0.47	0.969	8.130
Massachusetts	0.30	0.613	6.052
Mississippi	0.11	0.228	3.395
New Hampshire	0.12	0.250	2.821
New Jersey	0.43	0.894	12.447
New York	0.43	0.895	9.483
North Carolina	0.26	0.545	7.253
Oregon	0.07	0.145	1.742
Rhode Island	0.19	0.383	4.368
South Carolina	0.26	0.531	4.065
Texas	0.40	0.820	10.099
Virginia	0.29	0.602	4.543
Washington	0.23	0.464	5.323
All States	7.11	14.660	202.312

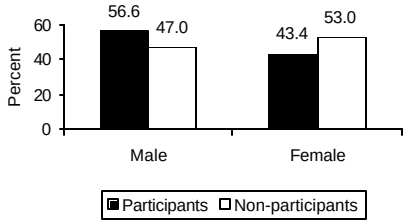
Age *Participants in motorboating are younger than non-participants*



Race/Ethnicity *Compared to non-participants, those participating in motorboating are comprised of a slightly higher proportion of non-Hispanic whites.*



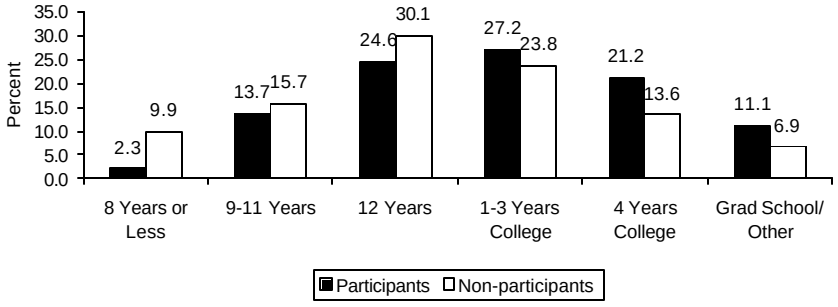
Sex *Participants in motorboating are comprised of a higher proportion of males.*



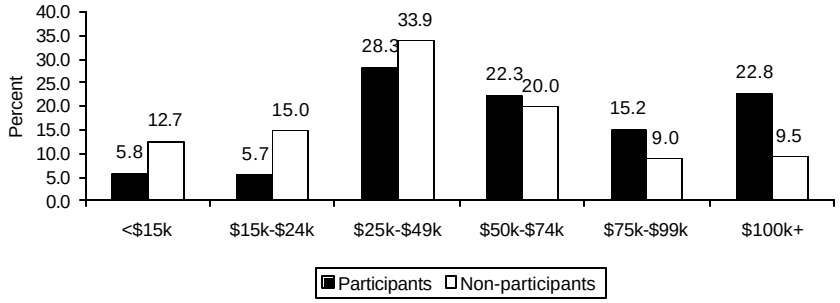
motorboating, except urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in motorboating, as these models would predict. The top five states, in terms of where people live and number from those states that participate in motorboating, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

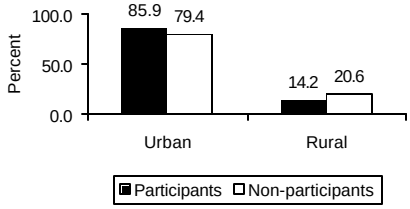
Education *Participants in motorboating are more educated than non-participants.*



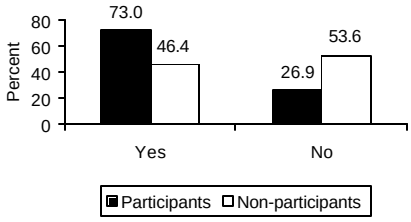
Household Income *Those participating in motorboating have a higher household income than those not participating.*



Urban/Rural *Participants in motorboating are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**4.0**	**13.3**
New England	1.8	14.4
Middle Atlantic	2.2	12.3
South	**6.3**	**16.0**
South Atlantic	4.2	16.4
East South Central	0.5	18.7
West South Central	1.6	13.6
Midwest	**1.3**	**10.1**
East North Central	0.9	8.5
West North Central	0.4	12.6
West	**3.1**	**11.9**
Mountain	0.5	10.6
Pacific	2.6	12.3
Total	**14.7**	**13.8**

Top 5 States Place of Residence

State	Participants (millions)
1. Florida	1.567
2. California	1.505
3. New York	0.928
4. Texas	0.887
5. New Jersey	0.816

Sailing

Sailing was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to Sailing on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, about three percent of the civilian non institutionalized population 16 years and older participated in Sailing in the U.S. This translated into an estimated 6.1 million participants, who undertook an estimated 48 million days of Sailing (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). There were no respondents who stated they participated in over 200 days of sailing, therefore the low, medium and high estimates are the same. For sailing in any type of water, there were over 10.4 million participants that spent over 84.0 million days of sailing. Marine or saltwater sailing accounted for about 58 percent of both participants and days of sailing.

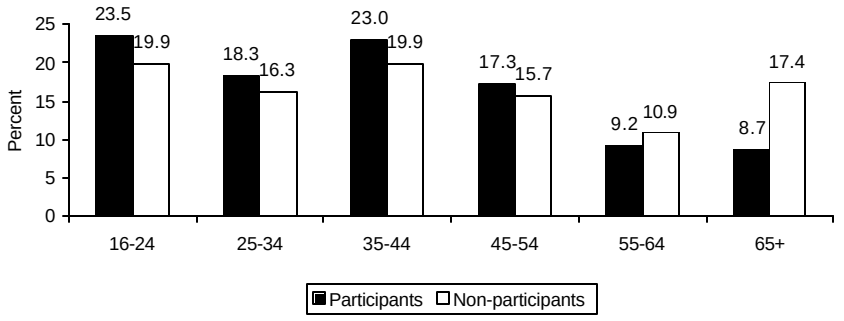
The top five states, in terms of number of participants, were California, Florida, Massachusetts, New York, and Maryland. In terms of days of Sailing, the top five states were California, Florida, Hawaii, Maryland and New York. For several states, there was an insufficient sample size (*) for estimating the number of days.

Socioeconomic Profiles. A comparison of participants versus non participants in Sailing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Sailing. We found that each of these factors are statistically significant in explaining

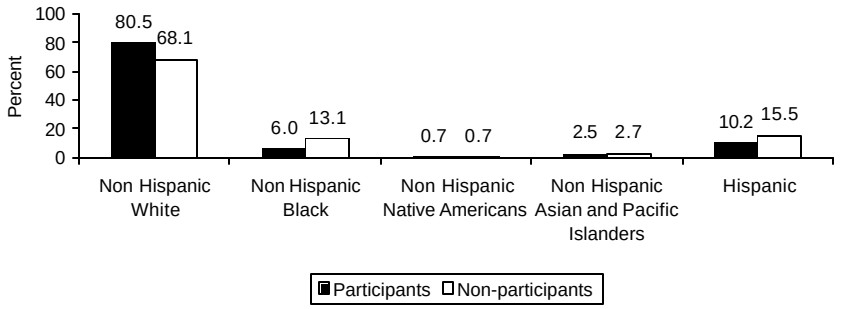
Sailing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.05	0.103	*
Alaska	0.02	0.032	*
California	0.53	1.088	6.755
Connecticut	0.12	0.247	1.467
Delaware	0.03	0.070	*
District of Columbia	0.00	0.006	*
Florida	0.45	0.926	5.493
Georgia	0.04	0.074	*
Hawaii	0.19	0.397	5.126
Louisiana	0.04	0.072	*
Maine	0.10	0.203	1.256
Maryland	0.22	0.450	3.004
Massachusetts	0.25	0.522	2.920
Mississippi	0.02	0.047	*
New Hampshire	0.04	0.075	*
New Jersey	0.12	0.252	1.729
New York	0.22	0.456	2.962
North Carolina	0.07	0.134	0.465
Oregon	0.01	0.030	*
Rhode Island	0.16	0.329	2.912
South Carolina	0.09	0.195	1.292
Texas	0.08	0.159	1.403
Virginia	0.05	0.108	0.685
Washington	0.09	0.186	1.637
All States	2.98	6.136	48.476

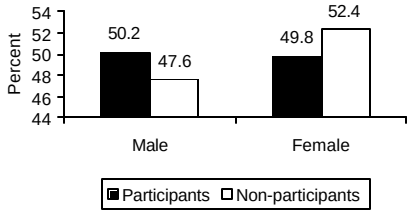
Age *Participants in sailing are younger than non-participants*



Race/Ethnicity *Compared to non-participants, those participating in sailing are comprised of a higher proportion of non-Hispanic whites.*



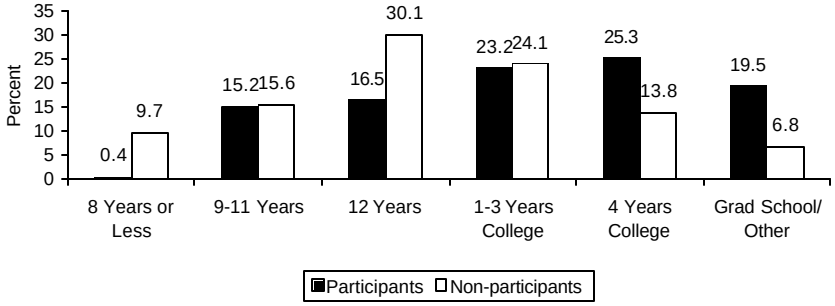
Sex *Participants in sailing are comprised of a higher proportion of males.*



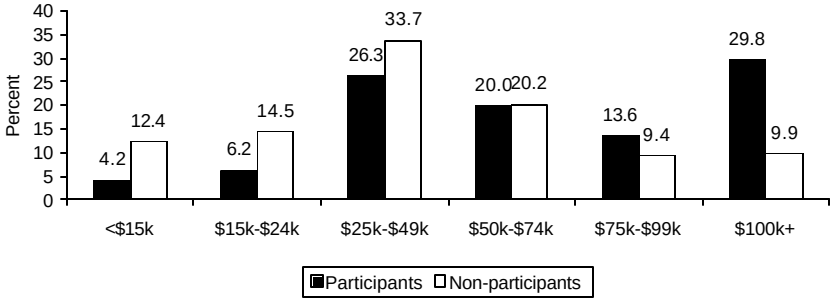
participation in sailing, except sex.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in sailing, as these models would predict. The top five states, in terms of where people live and number from those states that participate in sailing, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Compared to non participatns, participants in sailing are comprised of a higher proportion of those who have four years of college and graduate/professional school.*



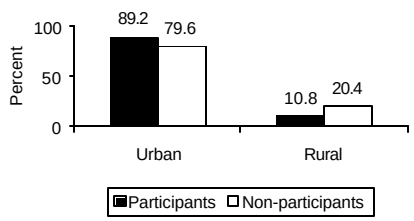
Household Income *Those participating in sailing have a higher household income than those not participating with the greatest concentration found in the highest income category.*



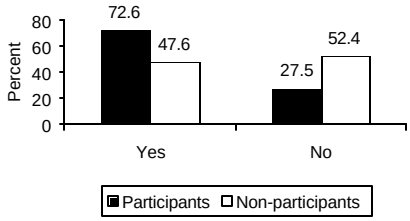
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**1.98**	**7.8**
New England	1.05	8.7
Middle Atlantic	0.93	6.8
South	**1.92**	**6.9**
South Atlantic	1.26	7.4
East South Central	0.27	4.5
West South Central	0.39	7.6
Midwest	**0.60**	**7.2**
East North Central	0.41	5.4
West North Central	0.19	*
West	**1.65**	**9.4**
Mountain	0.23	6.3
Pacific	1.42	10.0
Total	**6.14**	**7.9**

Urban/Rural *Participants in sailing are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	1.010
2. New York	0.454
3. Massachusetts	0.412
4. Florida	0.392
5. Connecticut	0.268

Personal Watercraft Use

Personal watercraft use includes the use of boats like jet skis and wave runners. This activity specifically refers to Personal watercraft use on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, 2.6 percent of the civilian non institutionalized population 16 years and older participated in Personal watercraft use in the U.S. This translated into an estimated 5.3 million participants, who undertook an estimated 44 million days of Personal watercraft use (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 41.1 million days and the high estimate was 45.4 million days. For personal watercraft use in any type of water, there were over 19 million participants that spent over 184 million days of participation. Marine or saltwater personal watercraft use accounted for over 27 percent of participants and 24 percent of days.

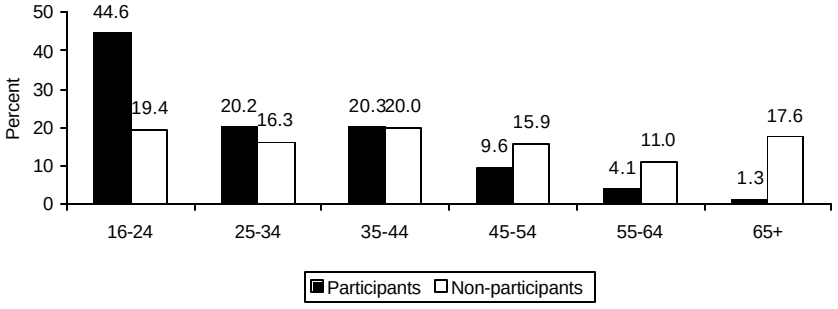
The top five states, in terms of number of participants, were Florida, California, Maryland, New York, and Texas. In terms of days of Personal watercraft use, the top five states were Florida, California, Texas, New York and Maryland. For several states, there was an insufficient sample size (*) for estimating the number of days.

Socioeconomic Profiles. A comparison of participants versus non participants in Personal watercraft use is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Personal watercraft use. We found

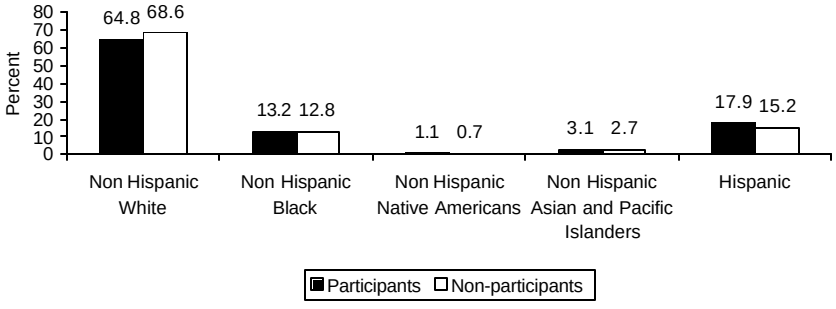
Personal Watercraft Use by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.07	0.139	0.699
Alaska	0.01	0.027	*
California	0.33	0.680	2.925
Connecticut	0.02	0.040	*
Delaware	0.08	0.161	*
District of Columbia	0.00	0.000	0.000
Florida	0.79	1.626	14.540
Georgia	0.05	0.098	*
Hawaii	0.06	0.132	0.905
Louisiana	0.07	0.136	*
Maine	0.01	0.027	*
Maryland	0.15	0.301	1.919
Massachusetts	0.07	0.135	*
Mississippi	0.03	0.070	*
New Hampshire	0.02	0.047	*
New Jersey	0.12	0.246	1.895
New York	0.14	0.283	2.429
North Carolina	0.09	0.182	1.349
Oregon	0.00	0.010	*
Rhode Island	0.02	0.037	*
South Carolina	0.07	0.142	0.837
Texas	0.13	0.272	2.906
Virginia	0.10	0.202	1.678
Washington	0.01	0.028	*
All States	2.57	5.304	44.239

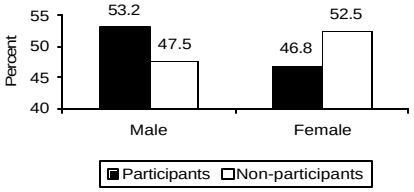
Age *Users of personal watercraft use are younger than non-users.*



Race/Ethnicity *Compared to non-users, those using personal watercraft use are comprised of a lower proportion of non-Hispanic whites.*



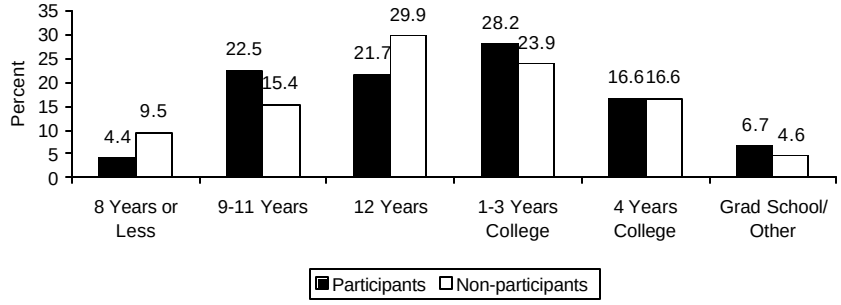
Sex *Users of personal watercraft are comprised of a higher proportion of males.*



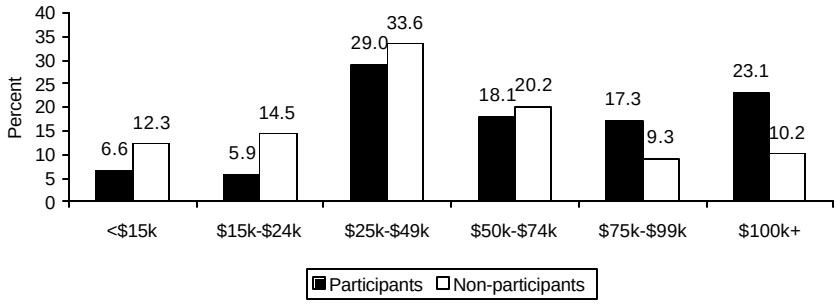
that each of these factors are statistically significant in explaining participation in personal watercraft use, except education level, race and sex.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in personal watercraft use, as these models would predict. The top five states, in terms of where people live and number from those states that participate in personal watercraft use, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

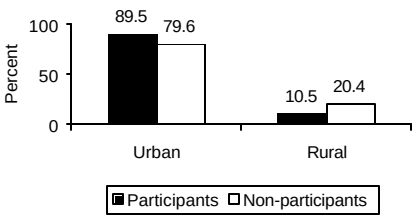
Education *Compared to non-users, users of personal watercraft are comprised of a higher proportion of those who have had 9-11 years of school, 1-3 years in college and graduate/professional school.*



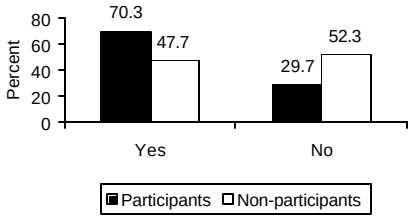
Household Income *Those participating in personal watercraft use have a higher household income than those not participating with the greatest concentration found in the highest income category.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**1.2**	**7.6**
New England	0.3	7.2
Middle Atlantic	0.9	7.7
South	**2.6**	**10.0**
South Atlantic	1.7	11.2
East South Central	0.3	7.8
West South Central	0.6	7.6
Midwest	**0.5**	**6.4**
East North Central	0.4	5.6
West North Central	0.2	*
West	**1.0**	**6.1**
Mountain	0.2	*
Pacific	0.8	6.4
Total	**5.3**	**8.3**

Top 5 States Place of Residence

State	Participants (millions)
1. Florida	0.701
2. California	0.660
3. Washington	0.412
4. New York	0.371
5. Texas	0.350

Canoeing

Canoeing was one of the outdoor recreation activities included in the participation module of the NSRE 2000, for which number of days was not asked. This activity specifically refers to canoeing on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, just over one percent of the civilian non institutionalized population 16 years and older participated in canoeing in the U.S. This translated into an estimated 2.2 million participants. For canoeing in any type of water, there were over 20 million participants. Marine or saltwater participants accounted for over 10.8 percent of all participants.

The top five states, in terms of number of participants, were Florida, Hawaii, Maine, California, and Maryland.

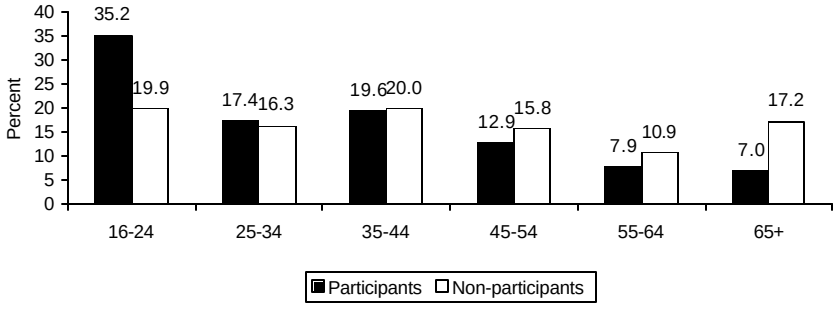
Socioeconomic Profiles. A comparison of participants versus non participants in canoeing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Canoeing. We found that each of these factors are statistically significant in explaining participation in canoeing, except household income and urbran or rural place of residence. Although the bar charts appear to show differences in participants and non participants with respect to these two factors. They are not signficant when holding other factors constant.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with

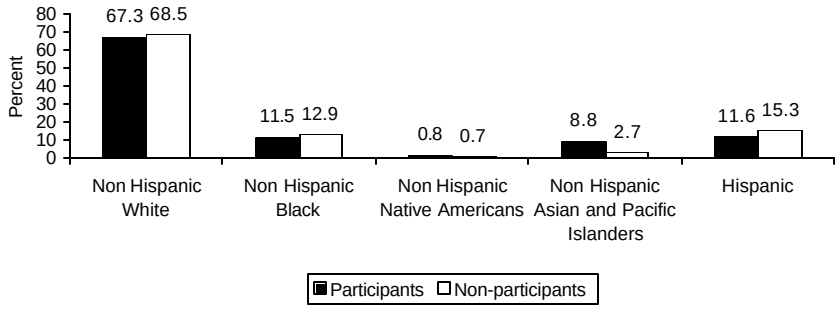
Canoeing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)
Alabama	0.01	0.019
Alaska	0.06	0.122
California	0.09	0.191
Connecticut	0.02	0.048
Delaware	0.02	0.039
District of Columbia	0.00	0.004
Florida	0.13	0.276
Georgia	0.00	0.006
Hawaii	0.12	0.257
Louisiana	0.01	0.019
Maine	0.11	0.221
Maryland	0.08	0.161
Massachusetts	0.04	0.074
Mississippi	0.00	0.010
New Hampshire	0.01	0.021
New Jersey	0.03	0.066
New York	0.03	0.065
North Carolina	0.02	0.040
Oregon	0.01	0.012
Rhode Island	0.07	0.146
South Carolina	0.01	0.026
Texas	0.02	0.046
Virginia	0.07	0.152
Washington	0.08	0.158
All States	1.05	2.172

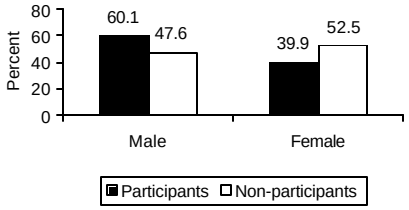
Age *Participants in canoeing are younger than non-participants.*



Race/Ethnicity *Compared to non participants, participants in canoeing are comprised of a higher proportion of non-Hispanic native Americans and non-Hispanic Asians/Pacific Islanders.*

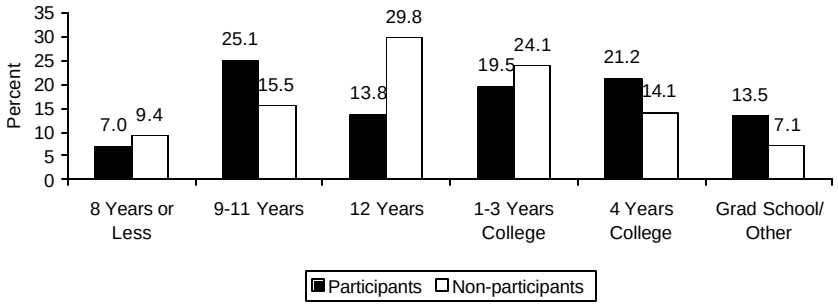


Sex *Participants in canoeing are comprised of a higher proportion of males.*

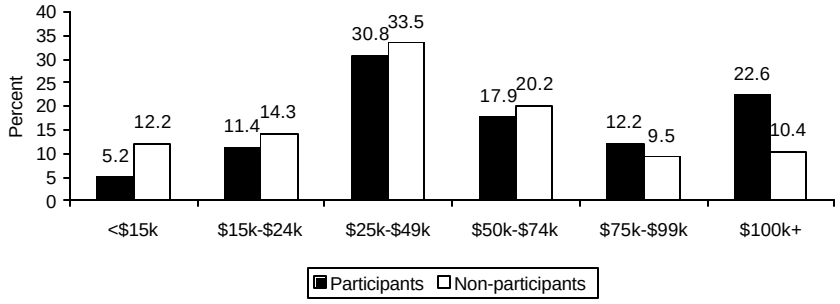


outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in canoeing, as these models would predict. The top five states, in terms of where people live and number from those states that participate in canoeing, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Participants in canoeing are comprised of a higher proportion of those who have had 9-11 years of school, 4 years in college and graduate/professional school.*



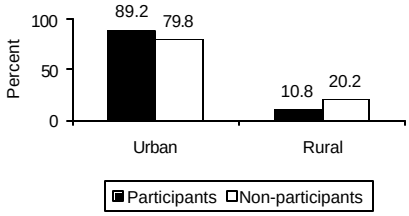
Household Income *Those participating in canoeing have a higher household income than those not participating.*



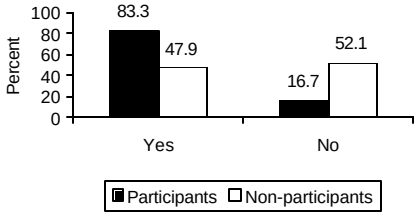
Place of Residence

Census Regions/Division	Participants (millions)
East	**0.515**
New England	0.268
Middle Atlantic	0.247
South	**0.907**
South Atlantic	0.722
East South Central	0.041
West South Central	0.144
Midwest	**0.124**
East North Central	0.103
West North Central	0.021
West	**0.598**
Mountain	0.021
Pacific	0.577
Total	**2.144**

Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. Florida	0.206
2. Califnornia	0.205
3. Hawaii	0.203
4. Maryland	0.165
5. New York	0.144

Kayaking

Kayaking was one of the outdoor recreation activities included in the participation module of the NSRE 2000 for which number of days were not asked. This activity specifically refers to kayaking on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over one percent of the civilian non institutionalized population 16 years and older participated in kayaking in the U.S. This translated into an estimated 2.7 million participants. For kayaking in any type of water, there were over 6.7 million participants. Marine or saltwater participants accounted for about 41 percent of all participants.

The top five states, in terms of number of participants, were California, Hawaii, Florida, Maine, and Massachusetts.

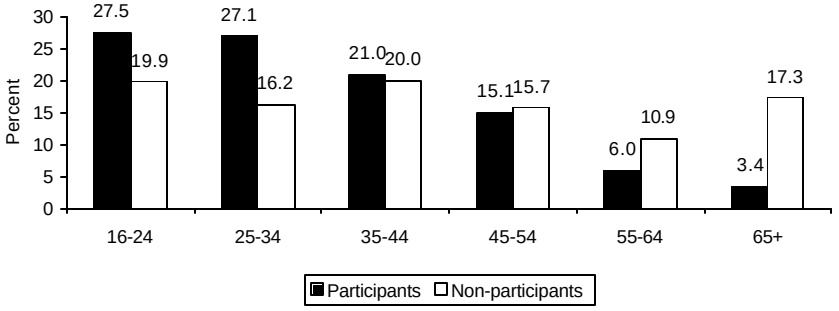
Socioeconomic Profiles. A comparison of participants versus non participants in kayaking is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Kayaking. We found that each of these factors are statistically significant in explaining participation in kayaking, except sex and urban or rural place of residence. Although the bar charts appear to show differences between participants and non participants for these two factors, they are not significant, holding other factors constant.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values

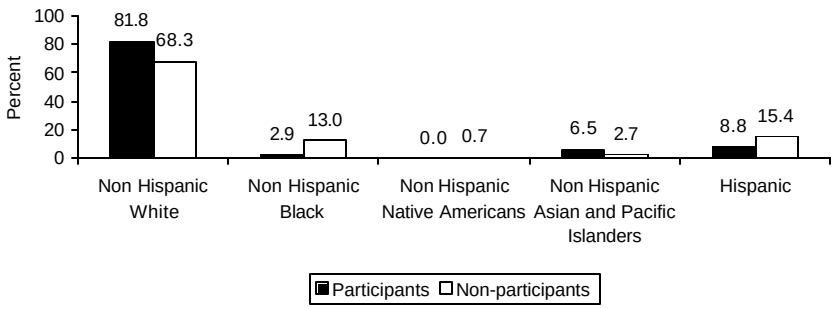
Kayaking by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)
Alabama	0.01	0.022
Alaska	0.04	0.083
California	0.21	0.433
Connecticut	0.05	0.097
Delaware	0.01	0.021
District of Columbia	0.00	0.000
Florida	0.16	0.338
Georgia	0.01	0.022
Hawaii	0.20	0.417
Louisiana	0.00	0.000
Maine	0.12	0.254
Maryland	0.02	0.032
Massachusetts	0.08	0.170
Mississippi	0.00	0.005
New Hampshire	0.03	0.057
New Jersey	0.05	0.096
New York	0.03	0.061
North Carolina	0.06	0.120
Oregon	0.01	0.020
Rhode Island	0.05	0.110
South Carolina	0.04	0.082
Texas	0.01	0.021
Virginia	0.03	0.055
Washington	0.07	0.142
All States	1.33	2.747

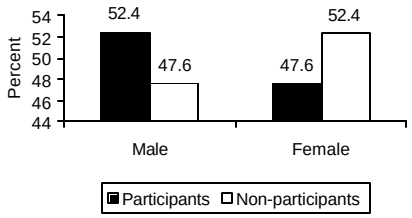
Age *Participants in kayaking are younger than non-users.*



Race/Ethnicity *Participants in kayaking are comprised of a higher proportion of non-Hispanic whites and non-Hispanic Asians/ Pacific Islanders.*

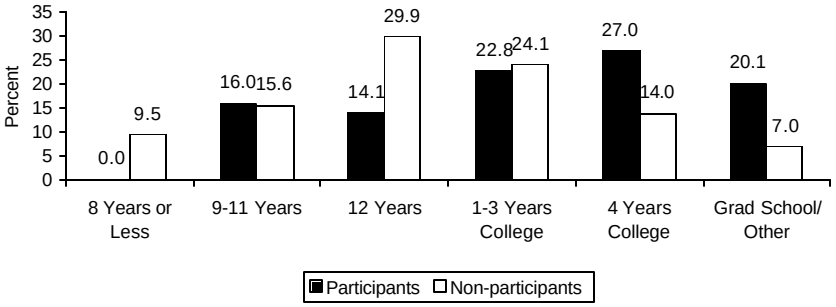


Sex *Participants in kayaking are comprised of a higher proportion of males.*

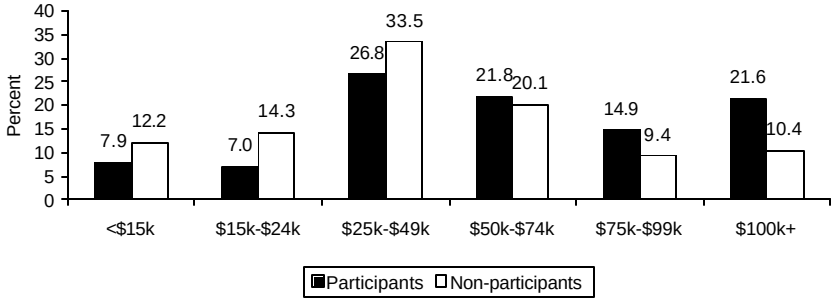


of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in kayaking, as these models would predict. The top five states, in terms of where people live and number from those states that participate in kayaking, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

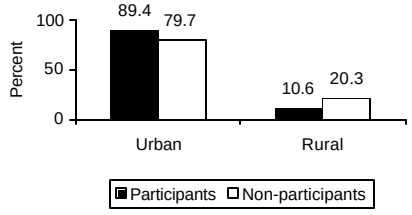
Education *Participants in kayaking are comprised of a slightly higher proportion of those who have had 9-11 years of school, and a considerably high proportion of those who have had 4 years in college and graduate/professional school.*



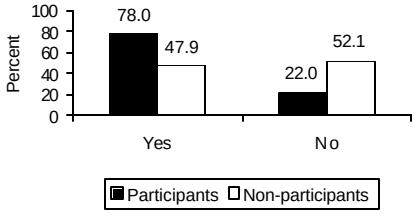
Household Income *Those participating in kayaking have a higher household income than those not participating.*



Urban/Rural *Participants are more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)
East	**0.887**
New England	0.557
Middle Atlantic	0.330
South	**0.639**
South Atlantic	0.515
East South Central	0.062
West South Central	0.062
Midwest	**0.227**
East North Central	0.186
West North Central	0.041
West	**1.031**
Mountain	0.103
Pacific	0.928
Total	**2.783**

Top 5 States Place of Residence

State	Participants (millions)
1. California	0.495
2. Hawaii	0.268
3. Florida	0.186
4. Massachusetts	0.144
5. New York	0.124

Rowing

Rowing was one of the outdoor recreation activities included in the participation module of the NSRE 2000, for which numbers of days were not asked. This activity specifically refers to rowing on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, about one half of a percent of the civilian non institutionalized population 16 years and older participated in rowing in the U.S. This translated into an estimated 1.1 million participants. For Rowing in any type of water, there were over 9.2 million participants. Marine or saltwater participants accounted for over 11.9 percent of all participants.

The top five states, in terms of number of participants, were California, Florida, New York, Maine, and Massachusetts.

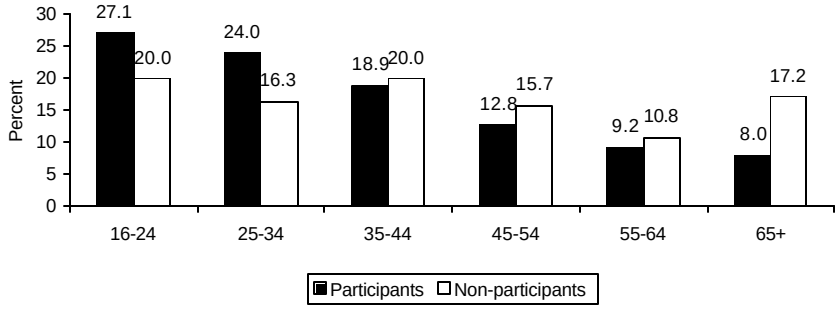
Socioeconomic Profiles. A comparison of participants versus non participants in rowing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Rowing. We found that none of these factors are statistically significant in explaining participation in rowing, except coastal county as place of residence, age, and race.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other

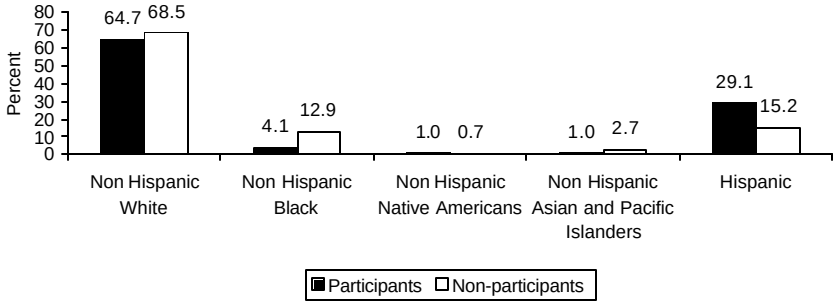
Rowing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)
Alabama	0.01	0.013
Alaska	0.01	0.014
California	0.14	0.280
Connecticut	0.02	0.042
Delaware	0.01	0.016
District of Columbia	0.00	0.000
Florida	0.07	0.153
Georgia	0.00	0.007
Hawaii	0.01	0.015
Louisiana	0.01	0.015
Maine	0.05	0.096
Maryland	0.02	0.049
Massachusetts	0.03	0.068
Mississippi	0.00	0.000
New Hampshire	0.00	0.000
New Jersey	0.02	0.047
New York	0.05	0.110
North Carolina	0.01	0.014
Oregon	0.01	0.031
Rhode Island	0.01	0.016
South Carolina	0.00	0.005
Texas	0.01	0.020
Virginia	0.00	0.008
Washington	0.02	0.034
All States	0.53	1.099

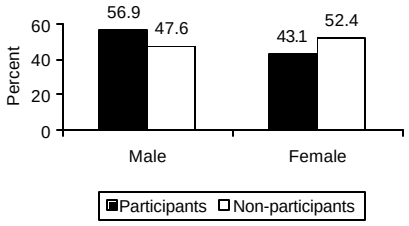
Age *Participants in rowing are younger than non-participants.*



Race/Ethnicity *Compared to non participants, participants in rowing are comprised of a higher proportion of non-Hispanic native Americans and Hispanics.*

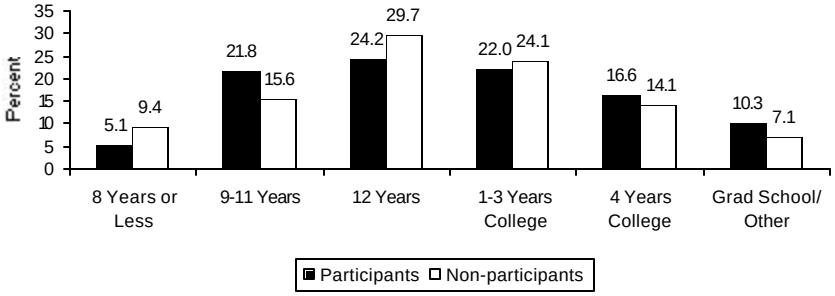


Sex *Participants in rowing are comprised of a higher proportion of males.*

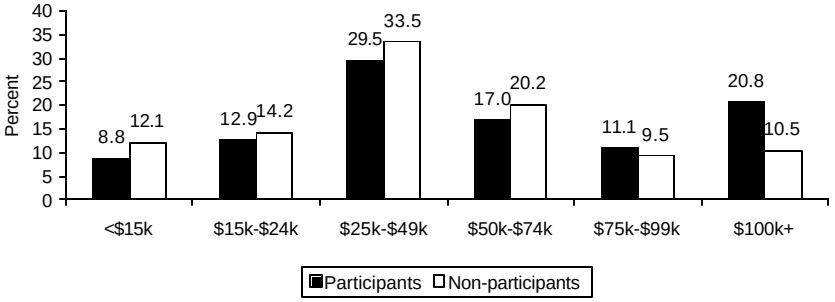


socioeconomic factors and site attributes. Coastal county residents are more likely to participate in rowing, as these models would predict. The top five states, in terms of where people live and number from those states that participate in rowing, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater beaches have the lowest number of participants.

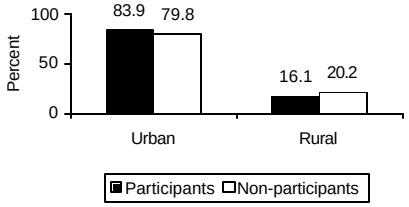
Education *Compared to non participants, participants in rowing are comprised of a higher proportion of those who have had 9-11 years of school, 4 years in college and graduate/professional school.*



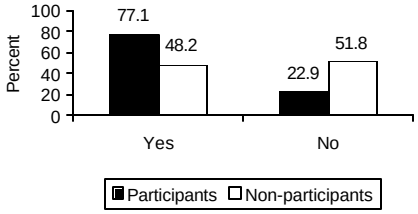
Household Income *Those participating in rowing have a higher household income than those not participating.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)
East	**0.392**
New England	0.206
Middle Atlantic	0.186
South	**0.309**
South Atlantic	0.227
East South Central	0.021
West South Central	0.062
Midwest	**0.041**
East North Central	0.000
West North Central	0.041
West	**0.350**
Mountain	0.062
Pacific	0.289
Total	**1.093**

Top 5 States Place of Residence

State	Participants (millions)
1. California	0.247
2. Florida	0.124
3. New York	0.120
4. Connecticut	0.082
5. Massachusetts	0.041

Water-skiing

Water-skiing was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to water-skiing on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over one percent of the civilian non institutionalized population 16 years and older participated in water-skiing in the U.S. This translated into an estimated 2.4 million participants, who undertook an estimated 28 million days of water-skiing (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 27.1 million days and the high estimate was 29.0 million days. For waterskiing on any type of water, there were over 16 million participants that spent over 158 million days of participation. Marine or saltwater water skiing accounted for over 14 percent of participants and over 17 percent of days.

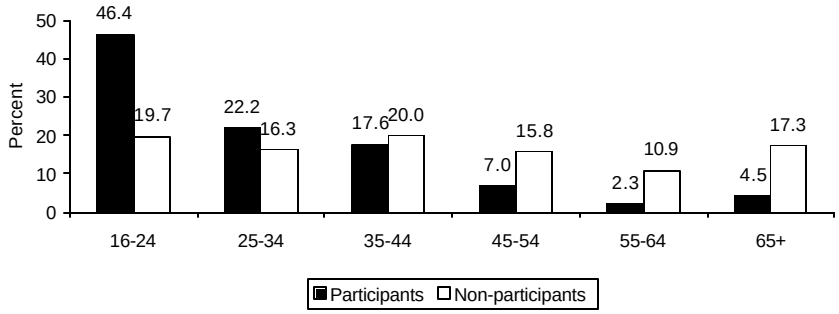
The top five states, in terms of number of participants, were Florida, California, Maryland, Virginia and Texas. In terms of days of participation the top five states could not be estimated because there was an insufficient sample size per state. States for which an estimate could be calculated included, in order of rank, Florida, California and Maryland.

Socioeconomic Profiles. A comparison of participants versus non participants in water-skiing is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Water-skiing.

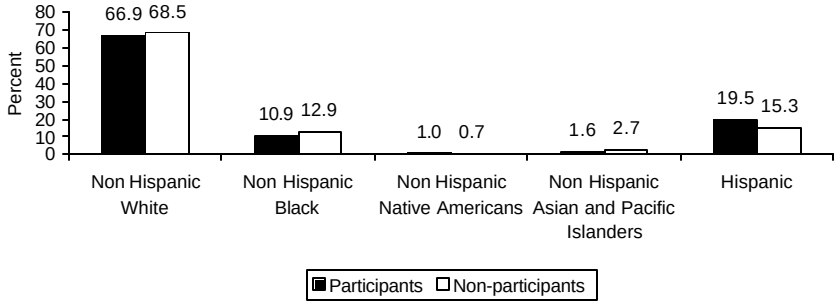
Water-Skiing by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.03	0.071	*
Alaska	0.00	0.004	*
California	0.13	0.266	3.269
Connecticut	0.02	0.035	*
Delaware	0.04	0.087	*
District of Columbia	0.00	0.000	*
Florida	0.30	0.613	4.475
Georgia	0.03	0.060	*
Hawaii	0.04	0.082	*
Louisiana	0.05	0.095	*
Maine	0.00	0.007	*
Maryland	0.08	0.170	1.044
Massachusetts	0.02	0.045	*
Mississippi	0.02	0.039	*
New Hampshire	0.00	0.006	*
New Jersey	0.06	0.123	*
New York	0.05	0.107	*
North Carolina	0.03	0.064	*
Oregon	0.01	0.024	*
Rhode Island	0.01	0.021	*
South Carolina	0.03	0.057	*
Texas	0.07	0.144	*
Virginia	0.08	0.159	*
Washington	0.03	0.061	*
All States	1.15	2.376	28.271

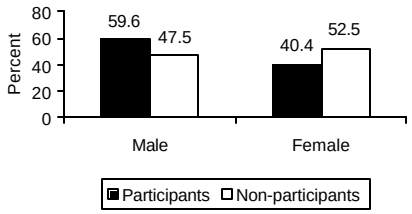
Age *Participants in water-skiing are younger than non-participants.*



Race/Ethnicity *Compared to non participants in water-skiing are comprised of a higher proportion of non-Hispanic native Americans and Hispanics than non-participants.*



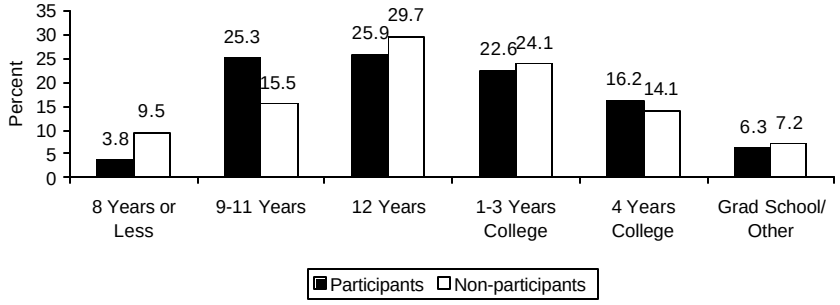
Sex *Participants in water-skiing are comprised of a higher proportion of males.*



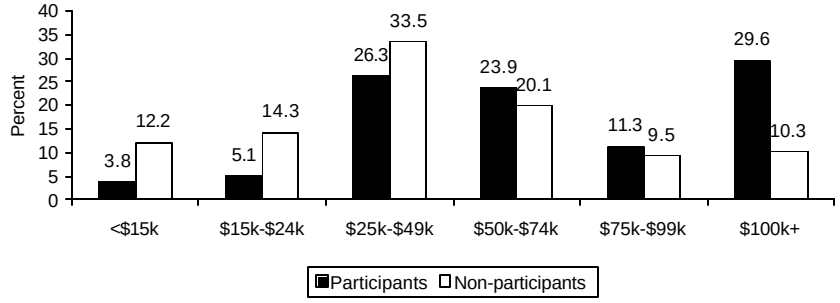
We found that all of these factors are statistically significant in explaining participation in water-skiing, except education level, race and urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in water-skiing, as these models would predict. The top five states, in terms of where people live and number from those states that participate in water-skiing, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

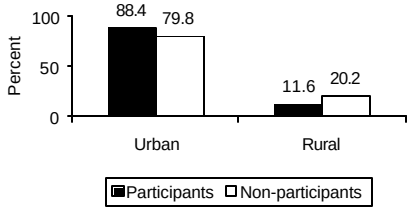
Education *Compared to non-participants in water-skiing are comprised of a higher proportion of those who have had 9-11 years of school 4 years in college.*



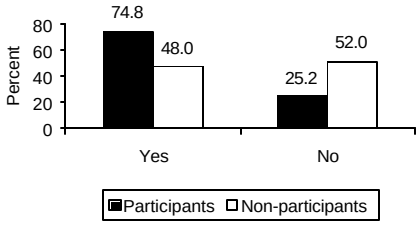
Household Income *Those participating in water-skiing have a higher household income than those not participating.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**0.54**	**8.7**
New England	0.16	*
Middle Atlantic	0.37	8.5
South	**1.24**	**14.2**
South Atlantic	0.78	12.5
East South Central	0.14	*
West South Central	0.31	*
Midwest	**0.16**	**4.5**
East North Central	0.10	*
West North Central	0.06	*
West	**0.43**	**12.1**
Mountain	0.10	*
Pacific	0.33	14.0
Total	**2.37**	**11.9**

Top 5 States Place of Residence

State	Participants (millions)
1. Florida	0.309
2. California	0.210
3. New York	0.165
4. Texas	0.162
5. Virginia	0.124

Bird watching

Bird watching was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to bird watching near salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, over seven percent of the civilian non institutionalized population 16 years and older participated in bird watching in the U.S. This translated into an estimated 14.8 million participants, who undertook an estimated 630 million days of bird watching (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 257.7 million days and the high estimate was 913.8 million days. For bird watching near any type of water, there were over 62 million participants that spent over 3.5 billion days of participation. Marine or saltwater bird-watching accounted for over 23 percent of participants and over 17 percent of days.

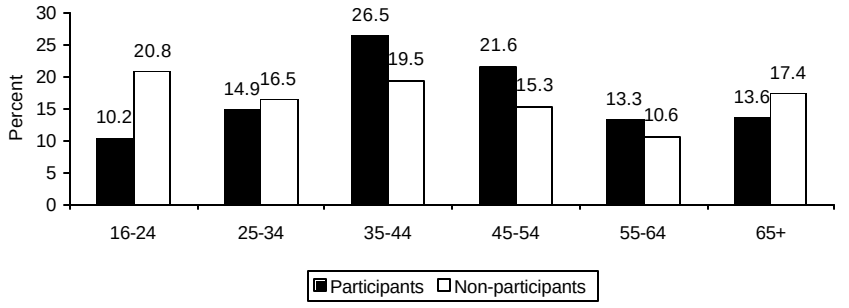
The top five states, in terms of number of participants, were Florida, California, North Carolina, Massachusetts, and Maine. In terms of days of bird watching, the top five states were Florida, California, Massachusetts, Alaska and New York.

Socioeconomic Profiles. A comparison of participants versus non participants in bird watching is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Bird watching. We found that all of these factors are statistically significant in explaining participation in bird watching,

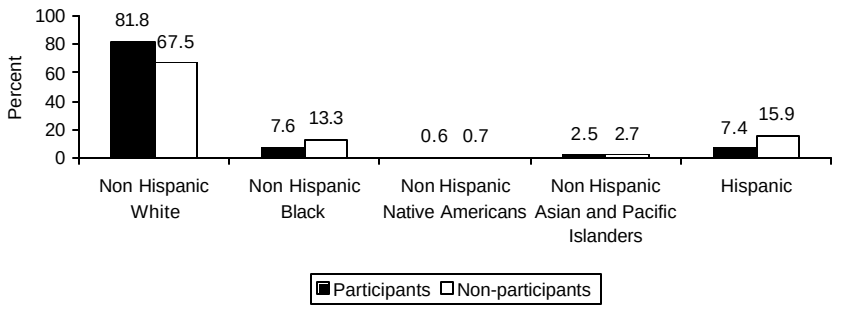
Bird-Watching by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.17	0.351	4.719
Alaska	0.30	0.616	24.835
California	1.25	2.582	65.762
Connecticut	0.22	0.447	15.192
Delaware	0.21	0.428	14.027
District of Columbia	0.01	0.027	*
Florida	1.64	3.373	77.952
Georgia	0.18	0.373	6.209
Hawaii	0.31	0.635	21.492
Louisiana	0.19	0.387	9.114
Maine	0.43	0.888	19.982
Maryland	0.40	0.817	19.760
Massachusetts	0.49	1.016	26.102
Mississippi	0.15	0.317	7.248
New Hampshire	0.19	0.389	8.630
New Jersey	0.39	0.795	18.804
New York	0.42	0.876	24.553
North Carolina	0.50	1.041	20.521
Oregon	0.28	0.571	11.051
Rhode Island	0.27	0.556	19.005
South Carolina	0.42	0.868	20.945
Texas	0.39	0.805	16.051
Virginia	0.42	0.862	16.997
Washington	0.42	0.857	18.930
All States	7.17	14.785	630.126

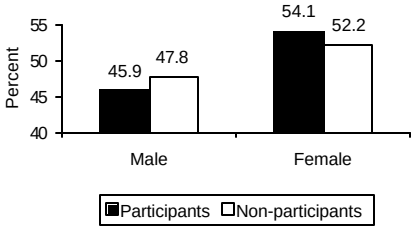
Age *Participants in bird-watching are comprised of a higher proportion of those aged 35-64.*



Race/Ethnicity *Compared to non-participants, participants in bird-watching are comprised of a higher proportion of non-Hispanic whites.*



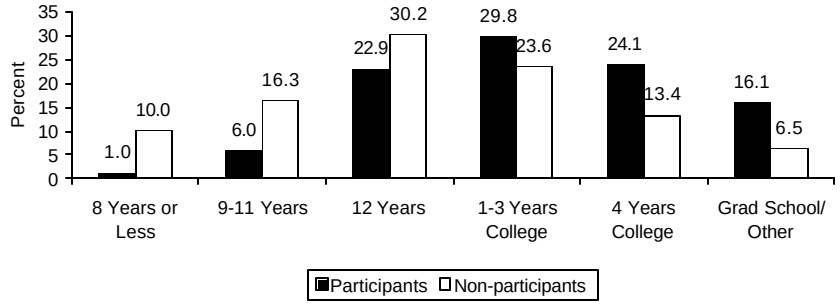
Sex *Participants in bird-watching are comprised of a higher proportion of females.*



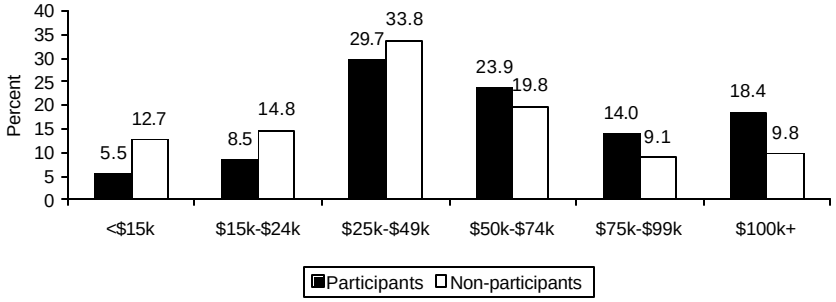
except urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in bird-watching, as these models would predict. The top five states, in terms of where people live and number from those states that participate in bird-watching, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Compared to non-participants, participants in bird-watching are more educated than non-participants.*



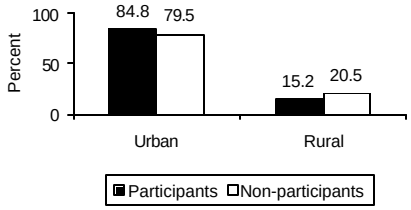
Household Income *Compared to non-participants, those participating in bird-watching have a higher household income than those not participating.*



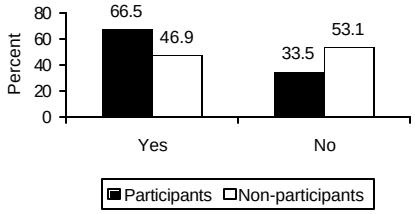
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**3.9**	**40.1**
New England	2.0	50.6
Middle Atlantic	1.9	29.1
South	**5.5**	**45.9**
South Atlantic	3.8	47.5
East South Central	0.7	44.1
West South Central	1.1	42.4
Midwest	**1.6**	**35.9**
East North Central	1.1	36.5
West North Central	0.5	34.8
West	**3.8**	**43.4**
Mountain	0.6	32.8
Pacific	3.2	45.3
Total	**14.8**	**42.6**

Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	1.917
2. Florida	1.258
3. New York	0.866
4. Texas	0.660
5. Massachussets	0.639

Viewing Other Wildlife in Water-based Surroundings

Viewing other wildlife in water-based surroundings was one of the outdoor recreation activities included in the participation module of the NSRE 2000.

Participants and Days. In 1999-2000, over six percent of the civilian non institutionalized population 16 years and older participated in viewing other wildlife in water-based surroundings in the U.S. This translated into an estimated 13.3 million participants, who undertook an estimated 341 million days of viewing other wildlife in water-based surroundings (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was million days and the high estimate was 929.5 million days. For beaches adjacent to any type of water, there were over 82 million participants that spent over 1.1 billion days at the beach. Marine or saltwater viewing of other wildlife in water-based surroundings accounted for over 75 percent of both participants and days of beach visitation.

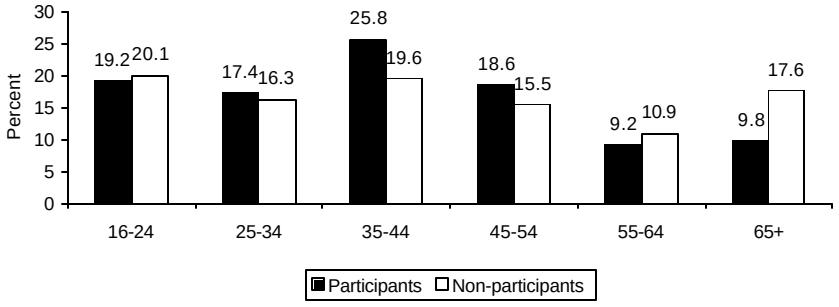
The top five states, in terms of number of participants, were Florida, California, Hawaii, Virginia and North Carolina. In terms of days of viewing other wildlife in water-based surroundings, the top five states were Florida, California, Alaska, Hawaii and New York.

Socioeconomic Profiles. A comparison of participants versus non participants in viewing other wildlife in water-based surroundings is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). We found that all of these factors are statistically significant in explaining participation in viewing other wildlife in water-

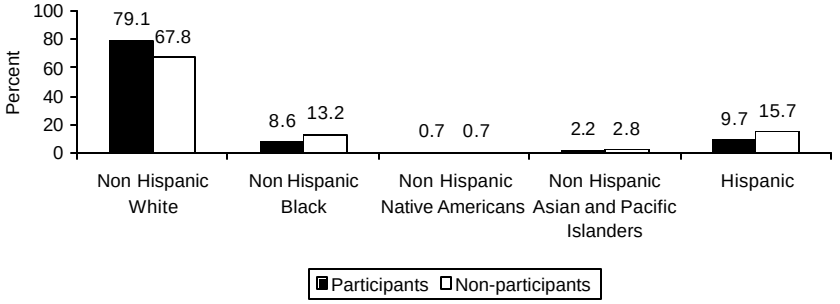
Viewing other Wildlife in Water-based Surroundings by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.18	0.364	6.435
Alaska	0.32	0.666	19.933
California	1.24	2.552	38.582
Connecticut	0.12	0.248	5.436
Delaware	0.11	0.221	5.461
District of Columbia	0.01	0.022	*
Florida	1.38	2.846	50.264
Georgia	0.18	0.370	3.817
Hawaii	0.41	0.856	19.131
Louisiana	0.19	0.385	10.555
Maine	0.32	0.661	10.746
Maryland	0.36	0.746	13.001
Massachusetts	0.33	0.688	12.659
Mississippi	0.11	0.235	2.381
New Hampshire	0.14	0.284	6.751
New Jersey	0.29	0.591	8.293
New York	0.28	0.584	16.465
North Carolina	0.38	0.774	8.664
Oregon	0.33	0.679	7.990
Rhode Island	0.13	0.258	4.757
South Carolina	0.35	0.732	12.318
Texas	0.36	0.745	12.604
Virginia	0.41	0.846	10.725
Washington	0.36	0.736	12.297
All States	6.45	13.303	340.697

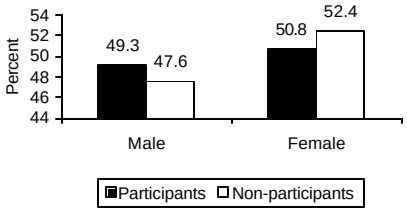
Age *Participants in viewing other wildlife are comprised of a higher proportion of those aged 25-54.*



Race/Ethnicity *Participants in viewing other wildlife are comprised of a higher proportion of non-Hispanic whites.*



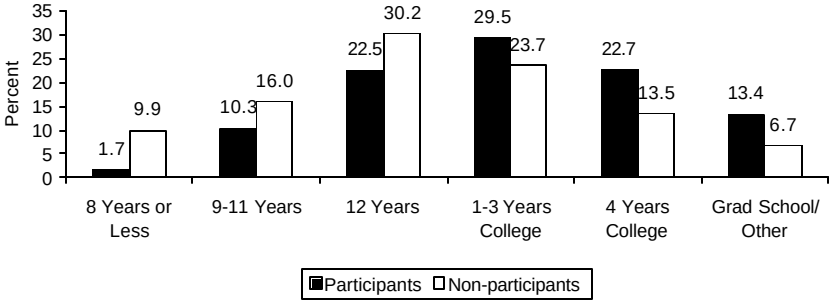
Sex *Participants in viewing wildlife are comprised of a higher proportion of females, but males have a higher participation rate.*



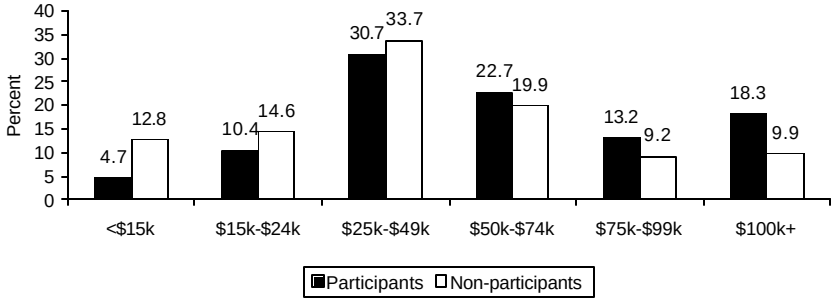
based surroundings, except urban or rural place of residence. Multivariate probit and logit equations were estimated relating these factors to the decision to participate in viewing wildlife. Although the results of these equations will not be presented here, they will be used in future research efforts to forecast future participation. The important point here is that each of the differences between participants and non participants displayed in the bar charts are statistically significant differences.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These model relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in viewing other wildlife, as these models would predict. The top five states, in terms of where people live and number from those states that participate in viewing other wildlife, are not surprisingly coastal states. This relationship also holds in comparing the number of participants by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

Education *Compared to non-participants, participants in viewing other wildlife are more educated than non-participants.*



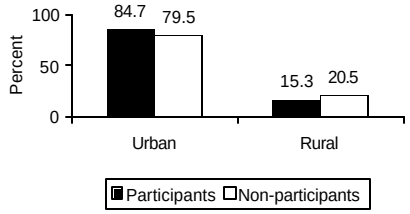
Household Income *Those participating in viewing wildlife have a higher household income than those not participating.*



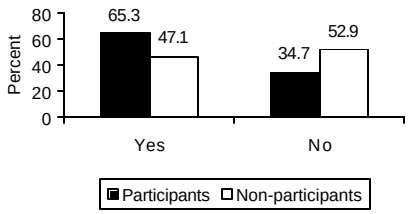
Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**2.9**	**28.4**
New England	1.3	32.1
Middle Atlantic	1.6	25.5
South	**5.0**	**25.4**
South Atlantic	3.3	26.8
East South Central	0.6	21.1
West South Central	1.1	24.3
Midwest	**1.6**	**21.0**
East North Central	1.1	20.8
West North Central	0.6	21.4
West	**3.8**	**26.0**
Mountain	0.6	15.2
Pacific	3.2	28.5
Total	**13.3**	**25.6**

Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Top 5 States Place of Residence

State	Participants (millions)
1. California	4.412
2. Florida	2.185
3. New York	1.649
4. Texas	1.629
5. Massachussets	1.216

Viewing or Photographing Scenery in Water-based Surroundings

Viewing or photographing scenery in saltwater surroundings was one of the outdoor recreation activities included in the participation module of the NSRE 2000.

Participants and Days. In 1999-2000, over nine percent of the civilian non institutionalized population 16 years and older participated in viewing or photographing scenery in the U.S. This translated into an estimated 18.9 million participants, who undertook an estimated 826 million days of viewing or photographing scenery (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). The low estimate across all states was 391.6 million days and the high estimate was 1.2 billion days. For viewing or photographing scenery near any type of water, there were over 76.3 million participants that spent over 3.3 billion days. Marine or saltwater viewing or photographing scenery in water-based surroundings accounted for about 25 percent of both participants and days of beach visitation.

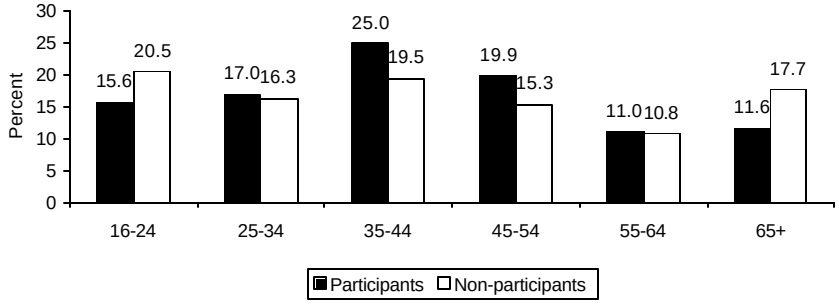
The top five states, in terms of number of participants, were California, Florida, Hawaii, Massachusetts, and Texas. In terms of days of viewing or photographing scenery, the top five states were California, Florida, Hawaii, Texas and Washington.

Socioeconomic Profiles. A comparison of participants versus non participants in viewing or photographing scenery is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). We found that all of these factors are statistically significant in explaining participation in viewing or photographing scenery. Multivariate probit and logit equa-

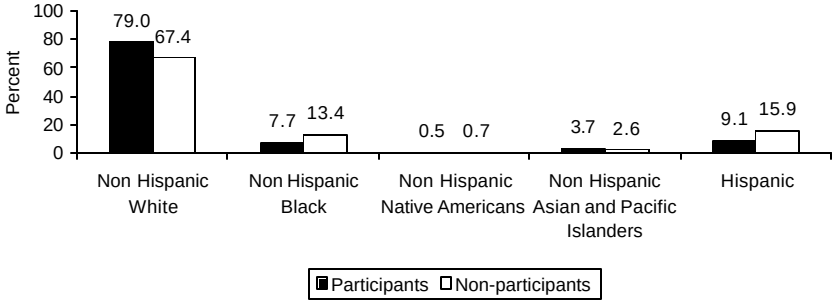
Viewing or Photographing Scenery in Water-based Surroundings by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.21	0.441	7.369
Alaska	0.31	0.649	27.694
California	2.03	4.175	107.892
Connecticut	0.28	0.575	20.442
Delaware	0.18	0.378	12.363
District of Columbia	0.04	0.087	*
Florida	1.90	3.920	96.591
Georgia	0.24	0.493	7.091
Hawaii	0.72	1.487	53.615
Louisiana	0.29	0.596	16.902
Maine	0.53	1.102	23.446
Maryland	0.48	0.981	30.178
Massachusetts	0.64	1.324	31.006
Mississippi	0.21	0.427	8.856
New Hampshire	0.26	0.532	14.849
New Jersey	0.52	1.076	28.535
New York	0.49	1.020	27.838
North Carolina	0.54	1.106	18.320
Oregon	0.51	1.051	18.692
Rhode Island	0.31	0.647	16.462
South Carolina	0.46	0.942	17.759
Texas	0.58	1.193	32.188
Virginia	0.52	1.069	22.709
Washington	0.58	1.192	31.346
All States	9.19	18.944	826.134

Age *Participants in viewing or photographing scenery are comprised of a higher proportion of those aged 25-64.*



Race/Ethnicity *Participants in viewing or photographing scenery are comprised of a higher proportion of non-Hispanic whites and non-Hispanic Asians/Pacific Islanders.*

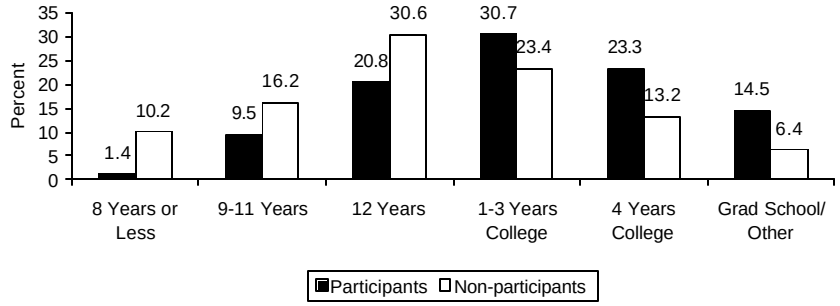


Sex *Participants are comprised of a higher proportion of females.*

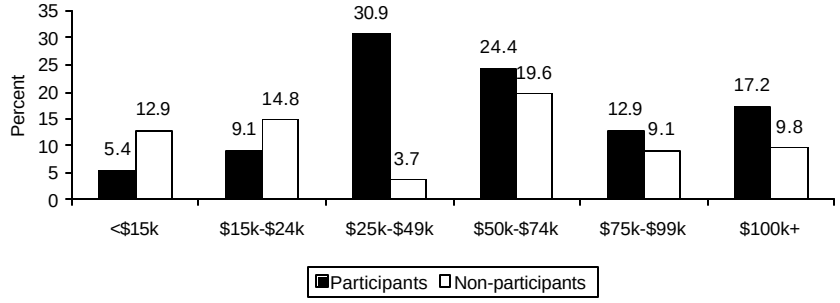
tions were estimated relating these factors to the decision to participate in viewing or photographing scenery. Although the results of these equations will not be presented here, they will be used in future research efforts to forecast future participation. The important point here is that each of the differences between participants and non participants displayed in the bar charts are statistically significant differences.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in veiwing or photographing scenery, as these models would predict. The top five states, in terms of where people live and number from those states that view or photograph scenery, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

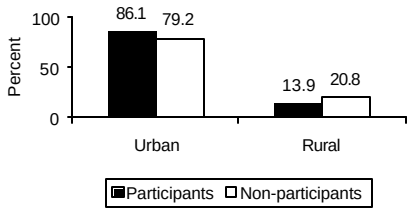
Education *Participants in viewing or photographing scenery are more educated than non-participants.*



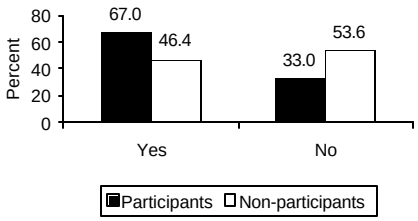
Household Income *Those participating in viewing or photographing scenery have a higher household income than those not participating.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**4.3**	**44.2**
New England	2.1	49.6
Middle Atlantic	2.2	39.1
South	**6.4**	**46.5**
South Atlantic	4.1	50.7
East South Central	0.7	33.6
West South Central	1.6	42.6
Midwest	**2.4**	**27.8**
East North Central	1.6	27.0
West North Central	0.8	29.8
West	**5.8**	**46.4**
Mountain	0.9	34.8
Pacific	4.9	48.6
Total	**18.9**	**43.6**

Top 5 States Place of Residence

State	Participants (millions)
1. California	2.866
2. Florida	1.319
3.Texas	1.051
4. New York	0.928
5. Massachussets	0.722

Hunting Watefowl

Hunting watefowl was one of the outdoor recreation activities included in the participation module of the NSRE 2000. This activity specifically refers to hunting watefowl on salt-water, including mixed fresh-saltwater in tidal portions of rivers and bays.

Participants and Days. In 1999-2000, less than one percent of the civilian non institutionalized population 16 years and older participated in hunting watefowl in the U.S. This translated into an estimated 680 thoussand participants, who under-took an estimated 6 million days of hunting watefowl (medium estimate, see Leeworthy and Wiley, 2001 for the low, medium and high estimates for each State). There were no respon-dents who stated they participated in over 200 days of hunting waterfowl, therefore the low, medium and high estimates are the same. For waterfowl hunting near any type of water, there were 4.9 million participants that spent over 60.6 million days waterfowl hunting. Marine or saltwater water-fowl hunting accounted for over 13 percent of participants and over 10 percent of days.

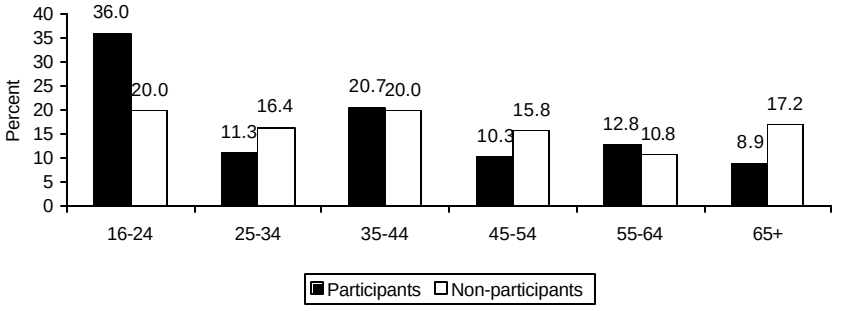
The top five states, in terms of number of participants, were California, Louisiana, Texas, Florida, and Ala-bama. There was insufficient sample size to estimate the the number of days waterfowl hunting by state.

Socioeconomic Profiles. A compari-son of participants versus non participants in hunting watefowl is presented here in a series of bar charts for selected socioeconomic factors. Socioeconomic factors include age, race/ethnicity, sex, education level, household income, urban or rural place of residence, and residence in a coastal or non coastal county (excluding Great Lakes). Multivariate probit and logit equations were estimated relating these factors to the decision to participate in Hunting watefowl. We found that all of these factors are statistically significant in

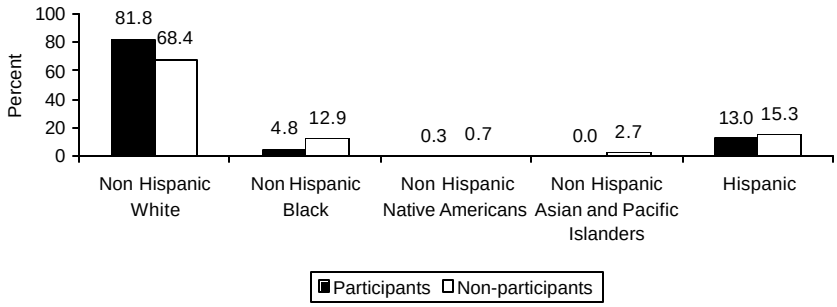
Hunting Waterfowl by State in Which Activity took Place

State	Participation Rate(%)	Number of Participants (millions)	Number of Days (millions)
Alabama	0.03	0.062	*
Alaska	0.02	0.043	*
California	0.05	0.113	*
Connecticut	0.00	0.000	*
Delaware	0.01	0.023	*
District of Columbia	0.00	0.000	*
Florida	0.03	0.072	*
Georgia	0.02	0.051	*
Hawaii	0.00	0.000	*
Louisiana	0.04	0.083	*
Maine	0.00	0.008	*
Maryland	0.01	0.029	*
Massachusetts	0.00	0.000	*
Mississippi	0.00	0.006	*
New Hampshire	0.01	0.011	*
New Jersey	0.01	0.012	*
New York	0.00	0.000	*
North Carolina	0.01	0.030	*
Oregon	0.00	0.010	*
Rhode Island	0.00	0.000	*
South Carolina	0.01	0.018	*
Texas	0.04	0.075	*
Virginia	0.02	0.037	*
Washington	0.01	0.023	*
All States	0.33	0.680	6.348

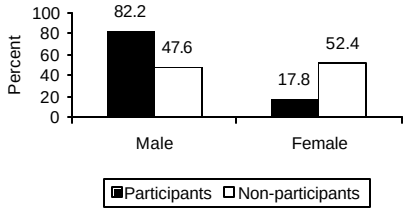
Age *Participants in waterfowl hunting are comprised of a higher proportion of those aged 16-24, 35-44 and 55-64.*



Race/Ethnicity *Participants in waterfowl are comprised of a higher proportion of non-Hispanic whites than non-participants.*



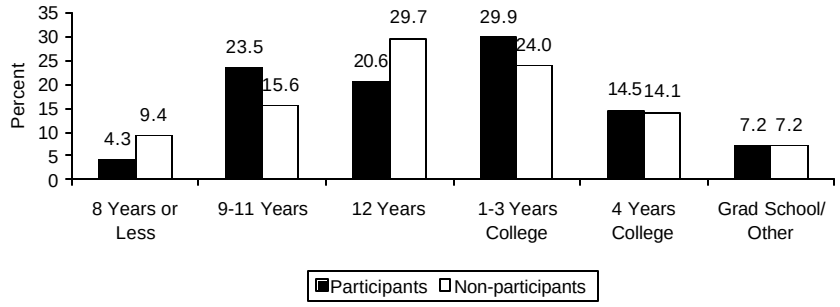
Sex *Participants are comprised of a higher proportion of males.*



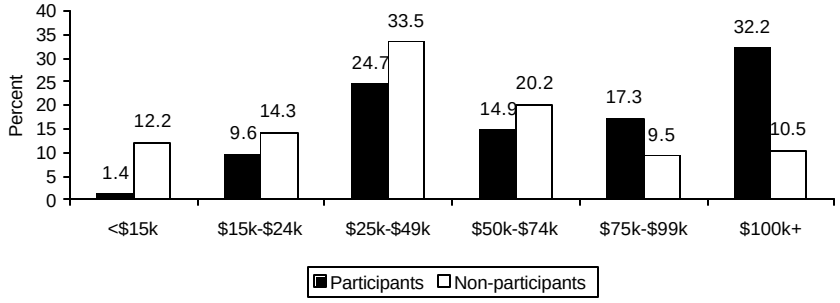
explaining participation in hunting watefowl, except age, race and urban or rural place of residence.

Place of Residence. The use of travel cost models has a long tradition in natural resource and environmental economics for estimating use values of natural resources associated with outdoor recreation uses. These models relate visitation to travel costs (distance being the important input to deriving travel costs) and other socioeconomic factors and site attributes. Coastal county residents are more likely to participate in waterfowl hunting, as these models would predict. The top five states, in terms of where people live and number from those states that participate in waterfowl hunting, are not surprisingly coastal states. This relationship also holds in comparing the number of participants and number of days of beach visitation by Census region and division. The Census Divisions that do not contain any states with saltwater access have the lowest number of participants.

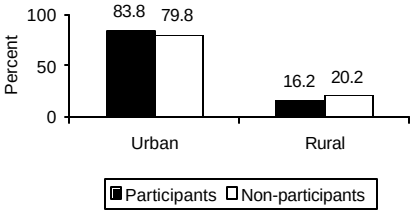
Education *Participants in waterfowl hunting are comprised of a higher proportion of those with 9-11 years of school and 1-4 years of college.*



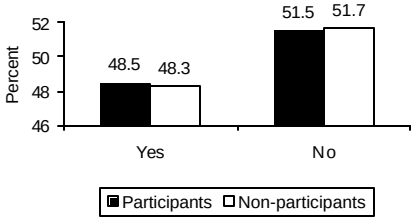
Household Income *Those participating in waterfowl hunting have a higher household income than those not participating.*



Urban/Rural *Participants are slightly more likely to live in an urban setting.*



Residence in Coastal County *Participants are more likely to live in a coastal county.*



Place of Residence

Census Regions/Division	Participants (millions)	Days/Person (mean)
East	**0.03**	*****
New England	0.03	*
Middle Atlantic	0.00	*
South	**0.41**	**9.2**
South Atlantic	0.21	*
East South Central	0.06	*
West South Central	0.14	*
Midwest	**0.03**	*****
East North Central	0.03	*
West North Central	0.00	*
West	**0.19**	**9.3**
Mountain	0.02	*
Pacific	0.16	*
Total	**0.68**	**9.3**

Top 5 States Place of Residence

State	Participants (millions)
1. California	0.103
2. Texas	0.082
3. Louisiana	0.068
4. Georgia	0.062
5. Alaska	0.041