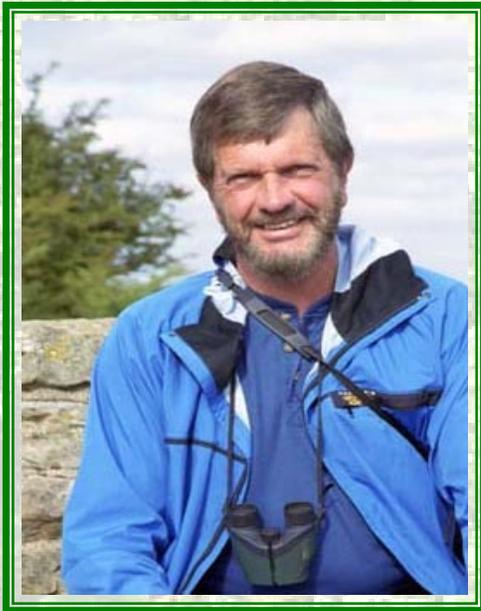


KNOWING THE PUBLIC FOR MORE EFFECTIVE EDUCATION AND MARKETING OF WILDERNESS



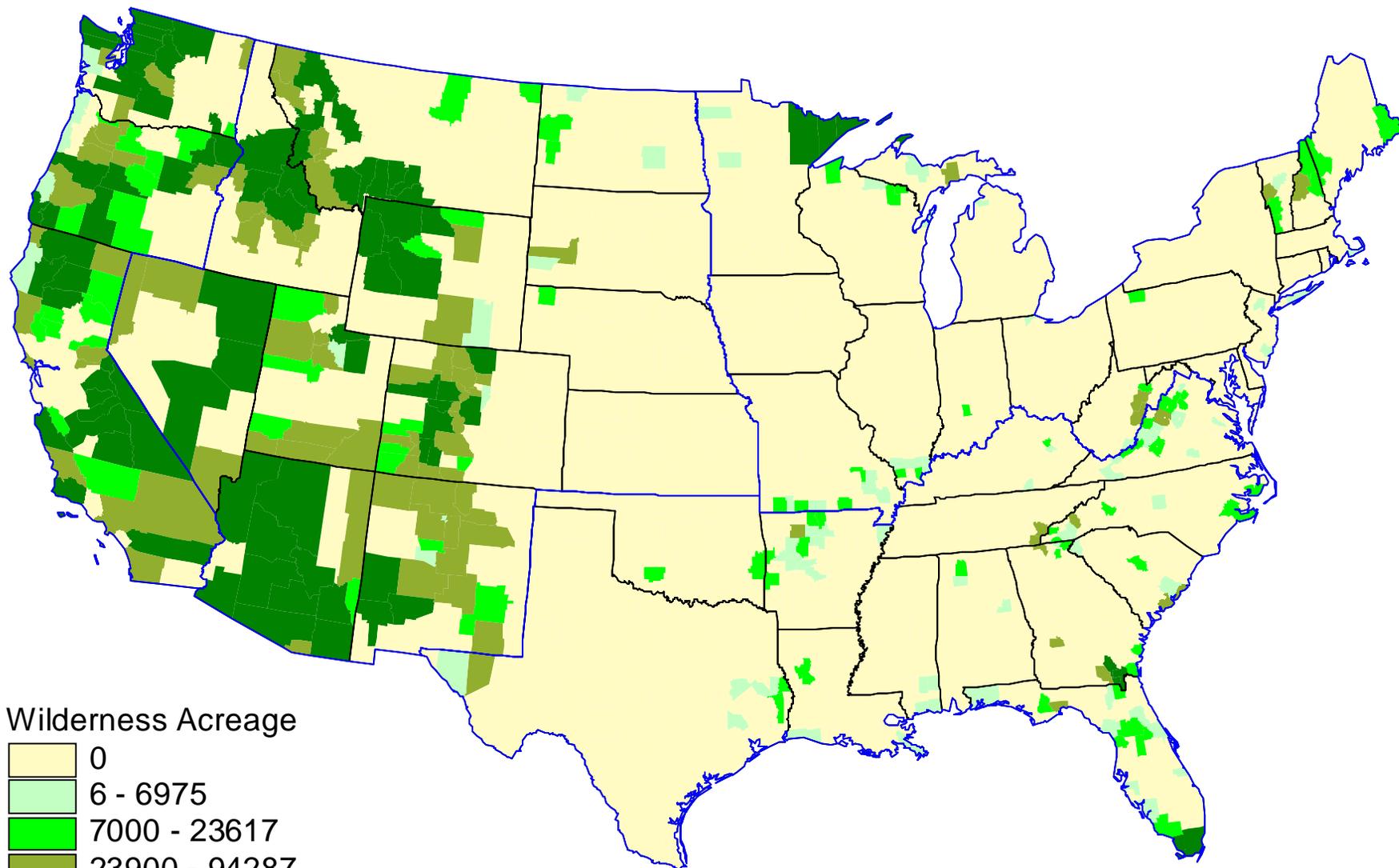
**Ken Cordell
Senior Scientist
Forest Service
Research
Athens, GA**

www.srs.fs.fed.us/trends

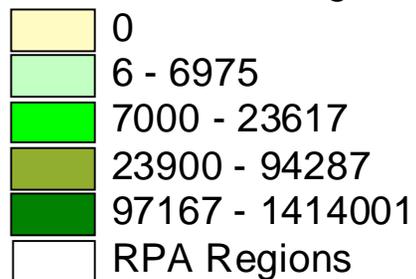
kcordell@fs.fed.us

Graphics by Shela Mou

Counties with Wilderness Acreage



Wilderness Acreage



Basic Environmental Values Led to Creation of the NWPS

- The United States has designated 629(ish) areas totalling 105+ million acres.
- On Federal lands, an additional 20 million acres are recommended for designation; between 35 and 45 million other roadless acres have been identified.
- The Congress is not likely to add substantially to the NWPS, but the former Administration moved to protect and restore roadless conditions. On NFs alone almost 60 million.
- Alpine, forest, desert, and water systems are better represented than grassland and subtropical ecosystems.
- Recreational use, nearby development, pollutants, and political winds raise uncertainties about the future of the NWPS.

A Changing America

A Changing America

The Changing American Society

➤ About 1 million new immigrants per year

➤ More people:

1990	248 mm
2000	275 mm
2020	325 mm
2050	404 mm
2075	481 mm
2100	571 mm

➤ Getting older: Median age 35 38 (by 2020)

➤ Changing ethnicities by 2050:

Anglo Americans	76%	50%
African Americans	12%	15%
Hispanic Americans	9%	21%
Asian Americans	4%	11%

**A BASIC QUESTION:
IS WILDERNESS STILL
APPROPRIATE AND
WANTED BY TODAY'S
U. S. SOCIETY?**



**SOCIAL CHANGE IS
CONTINUOUS,
POPULATION SURVEYING
SHOULD BE ALSO**

NATIONAL SURVEY
ON RECREATION
AND THE
ENVIRONMENT—

NSRE 2000

NSRE 2000

- **A sample of over 50,000 households, from the Keys to ANWR**
- **Includes individuals 16 years or older**
- **Ties back to the first National Recreation Survey, Outdoor Recreation Resources Review Commission in 1960**
- **Is the Nation's on-going recreation survey, the 8th**
- **Interagency sponsorship—USFS, NOAA, ERS, EPA, NPS, BLM.**
- **Others involved, National Scenic Byways Program, Heritage, Wilderness, Bicycle Safety, The Heinz Center**
- **State of the Art delivery—Internet, books and reports**

THE SCIENCE OF NSRE

- **Core of agency and university scientists in charge of design and analysis**
- **Advisory group of nationally renown scientists**
- **Follows all protocols of the National Association of Public Opinion Research**
- **Exhaustive pretesting**
- **Data collected using a CATI System with University of Tenn.**
- **Diagnostics and corrections for response and non-response bias**
- **Data weighted to Bureau of Census standards**
- **Analysis using SAS and SPSS**
- **Refereed publishing**

MODULES OF QUESTIONS

- **Participation in Recreational Activities**
- **Recreation Participation in Coastal States**
- **Frequency of Participation in Days**
- **Favorite Activities and Constraints**
- **Risk Activity Participation**
- **Nature-based Trip Taking**
- **Disabilities and Opinions about Management**
- **Environmental Attitudes and Values**
- **Values and Objectives for Management of Public Lands**
- **Wilderness Values, Knowledge, Visitation, and Preferences for Management**
- **Ownership of Private Land**
- **Lifestyles and Demographics**



LIFESTYLES--NEW

- Hobbies or other interests
- Do chores or garden at home
- Involved with family
- Into sports
- Community or civic activities
- Vacationing and travel
- Self study and cultural events
- Exercise
- Keep up with new technologies, internet, etc.
- Socializing and making friends
- Eating out



DETAILED HOUSEHOLD AND INDIVIDUAL DATA

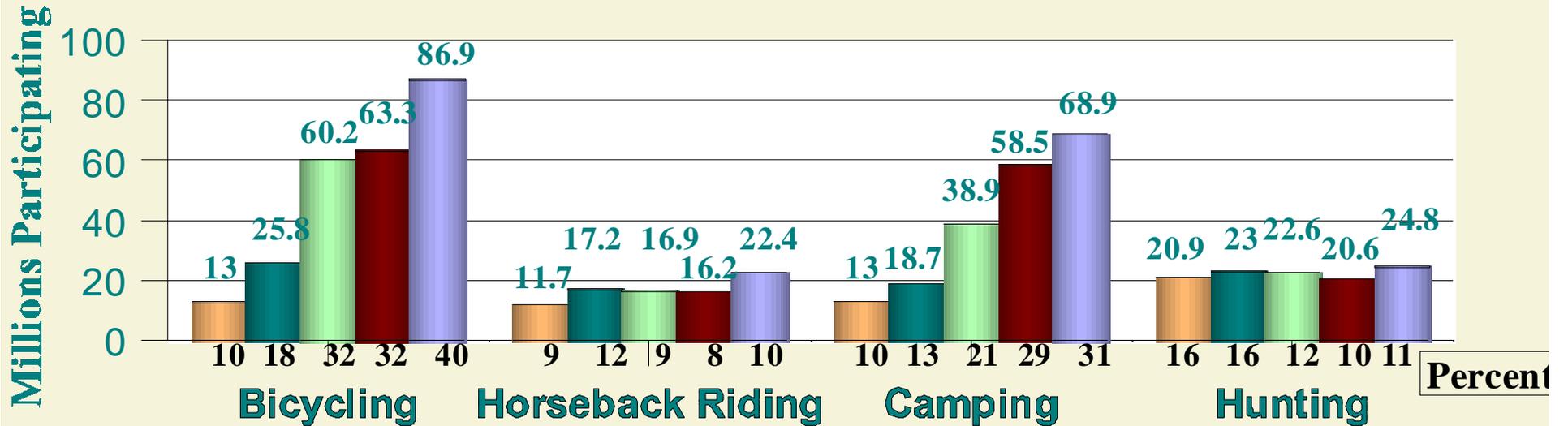


(Uses all Bureau of Census Protocols)
Number of household members by age and sex
Citizenship, where born and country of origin
Race and ethnicity
Occupation and employment status
City, rural/urban, ZIP Code
Childhood origin
Income and education
Disabilities

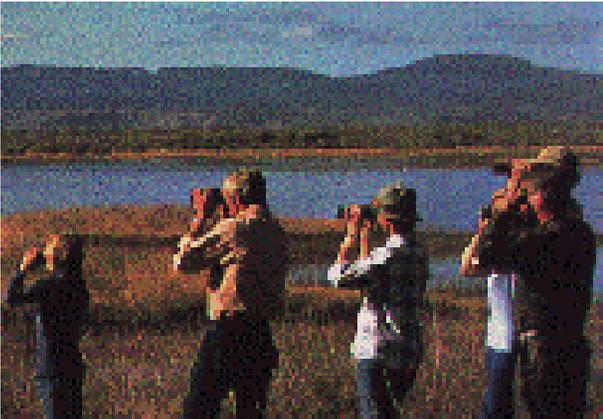
***OUTDOOR
RECREATION***

Long-Term Trends - Land

(12 or older)



- 1960 (131 million)
- 1965 (144 million, 10% more)
- 1982-83 (188 million, 44% more)
- 1994-95 (216 million, 65% more)
- 1999-2000 (220 million, 68% more)



Activities Rising Fastest By Percentage (1982 to 2000) (16 or older)

	<u>% Growth</u>	<u>No. in 2000</u>
Bird watching	235.9	71.2
Hiking	195.9	73.1
Backpacking	165.9	23.4
Snow-mobiling	107.5	66.9
Walking	91.2	179.0
Off-road driving	89.2	27.9
Primitive camping	81.9	32.2
Developed camping	76.0	52.8
Downhill skiing	66.9	17.7
Swimming/river, lake or ocean	64.4	78.1



Activities Adding the Most Participants 16 or older, 1982-2000

	<u>Millions</u>	
	<u>Growth</u>	<u>No. in 2000</u>
Walking	85.4	179.0
Bird watching	50.0	71.2
Hiking	48.4	73.1
Swimming/river, lake, or ocean	36.4	92.9
Sightseeing	32.7	114.0
Picnicking	31.8	116.6
Bicycling	27.4	83.9
Developed camping	22.8	52.8
Motor boating	17.8	51.4
Off-road driving	17.3	36.7
Backpacking	14.6	23.4

Year 2000 Wilderness Area Visits on National Forests

<u>Region</u>	<u>Visits (1000's)</u>
1	400
2	1,630
3	2,280
4	1,640
5	1,040
6	2,780
8	670
9	1,220
10	<u>1,450</u>
<i>TOTAL</i>	<i>13,110</i>

Source: National Recreation Use Monitoring Study, 1/24/01

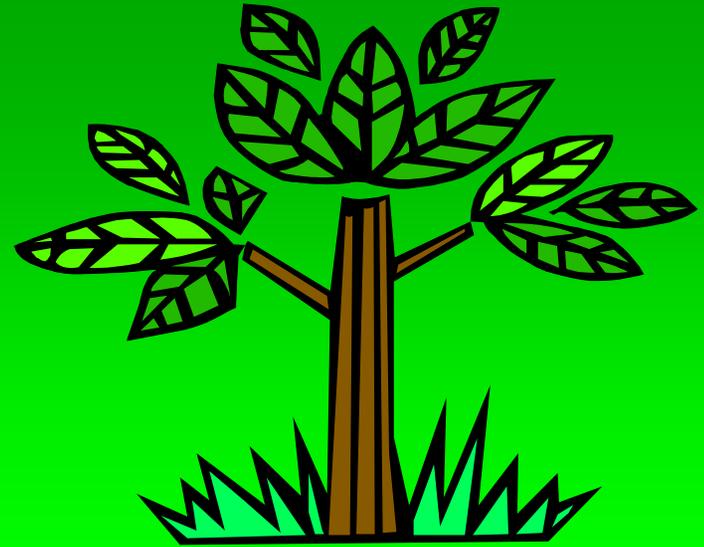
LIFESTYLES

Varied Lifestyles Varied Lifestyles

Activity	Percent Participating Regularly				
	North	South	Great Plains	Rocky Mtns	Pacific Coast
Belong to environmental group	7.3	9.0	8.6	8.9	8.0
Have a vacation home	15.1	15.1	11.3	15.3	15.5
Youth volunteer	19.9	20.4	20.2	19.8	17.3
Read nature magazines	25.1	27.1	27.6	23.6	26.1
Eat out	37.9	50.6	43.0	44.7	44.6
Exercise	40.6	41.2	39.4	45.4	46.7
Follow sports	44.3	48.9	43.5	43.5	45.3
Attend church	46.5	57.3	49.7	44.1	36.0
Use computer at home	56.0	51.8	50.5	55.6	58.7
Recycle	75.9	52.4	64.7	54.3	77.1

Varied Lifestyles Varied Lifestyles

Activity	Percent Participating Regularly				
	North	South	Great Plains	Rocky Mtns	Pacific Coast
Crafts	27.2	27.3	27.8	32.3	30.4
Grow a garden	32.8	30.6	34.5	30.4	33.6
Eat out	37.9	50.6	43.0	44.7	44.6
Exercise	40.6	41.2	39.4	45.4	46.7
Follow sports	44.3	48.9	43.5	43.5	45.3
Raise kids	44.6	47.0	46.2	42.2	44.3
Attend church	46.5	57.3	49.7	44.1	36.0
Use computer at home	56.0	51.8	50.5	55.6	58.7
Care for pets	56.7	59.5	60.3	62.0	60.3
Recycle	75.9	52.4	64.7	54.3	77.1
Cook at home	79.9	76.9	80.4	84.0	84.5



ENVIRONMENTAL ATTITUDES

Voting on the Most Important Issue

	First Choice	Second Choice
Reducing Crime	29	23
Reforming Health Care	22	22
Saving Social Security	21	21
Protecting the Environment	16	23
Reducing the Public Debt	9	10
Don't Know	3	1

“They (American’s surveyed) rank the environment third on their list of critical public issues requiring government support, just behind crime and education. 60% feel the government spends too little on the environment”.

(National Opinion Research Center, Chicago, Ill.)

Humans Were Meant to Rule Over Nature

29%

14%
Strongly Agree

15%
Somewhat Agree

61%

(6% Neutral)

19%
Somewhat Disagree

42%
Strongly Disagree

Spending on the Environment

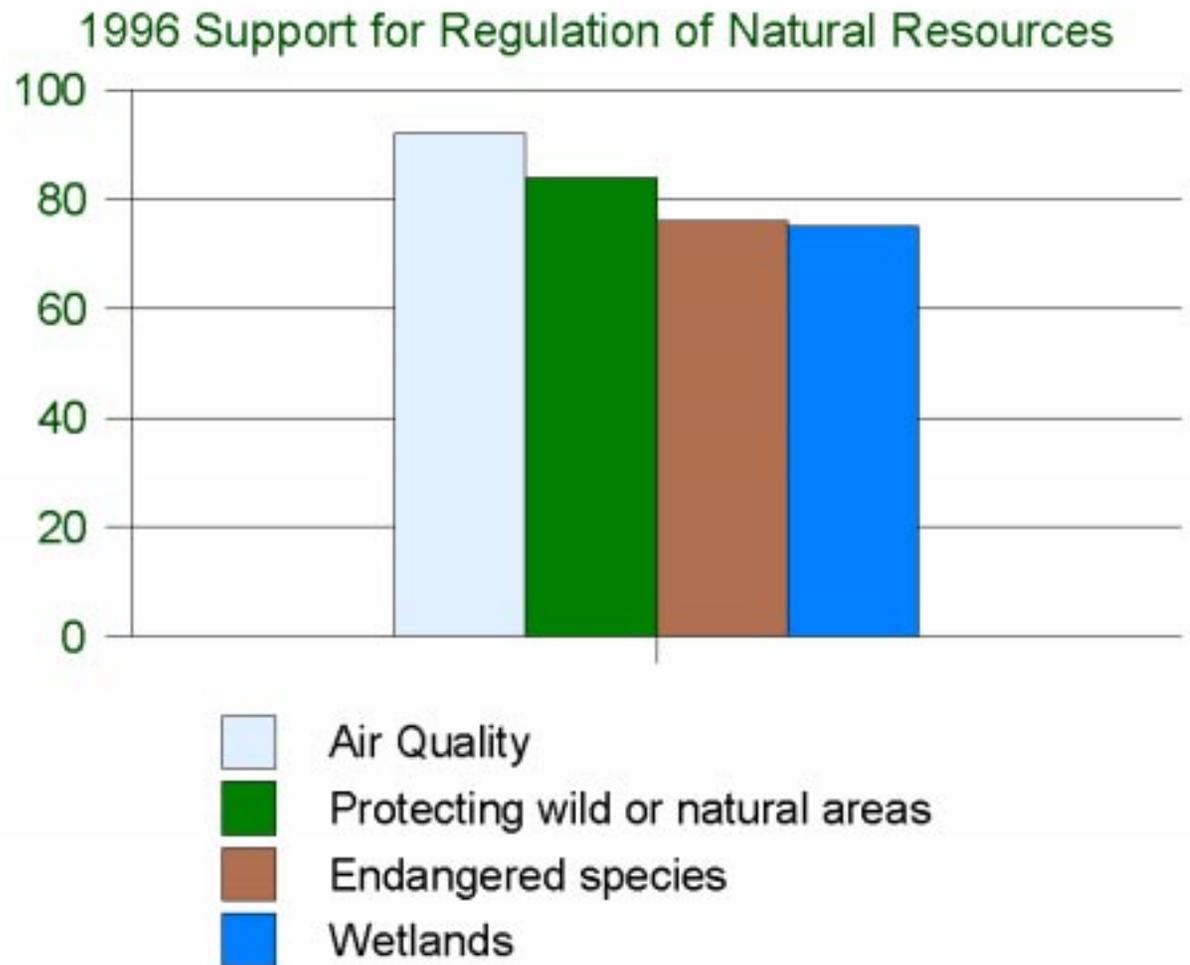
Too Much **7%**

Too Little **49%**

About Right **28%**

(Don't Know) **(15%)**

Percentage of Americans Reporting Regulation of Natural Resources is "Just the Right Amount" or has "Not Gone Far Enough."



Source: Dujack, 1997.

***Public
Thoughts on
Public
Lands***

Objectives for Managing Public Lands

Expanding access for motorized vehicles (20%)

Developing trail systems for motorized uses (29%)

Developing trail systems for non-motorized rec. (57%)

Conserving/protecting sources of water (91%)

Designating more wilderness areas (58%)

Developing paved roads for cars (19%)

Preserving resources through policies (75%)

Preserving wilderness experience (74%)

Protecting ecosystems/habitats (86%)

Providing resources to help local communities (51%)

Increasing acres in public land (53%)

Expanding commercial recreation (28%)

Informing public on potential environmental impacts (81%)



Public Land Management Objectives MOST Desired by the Public

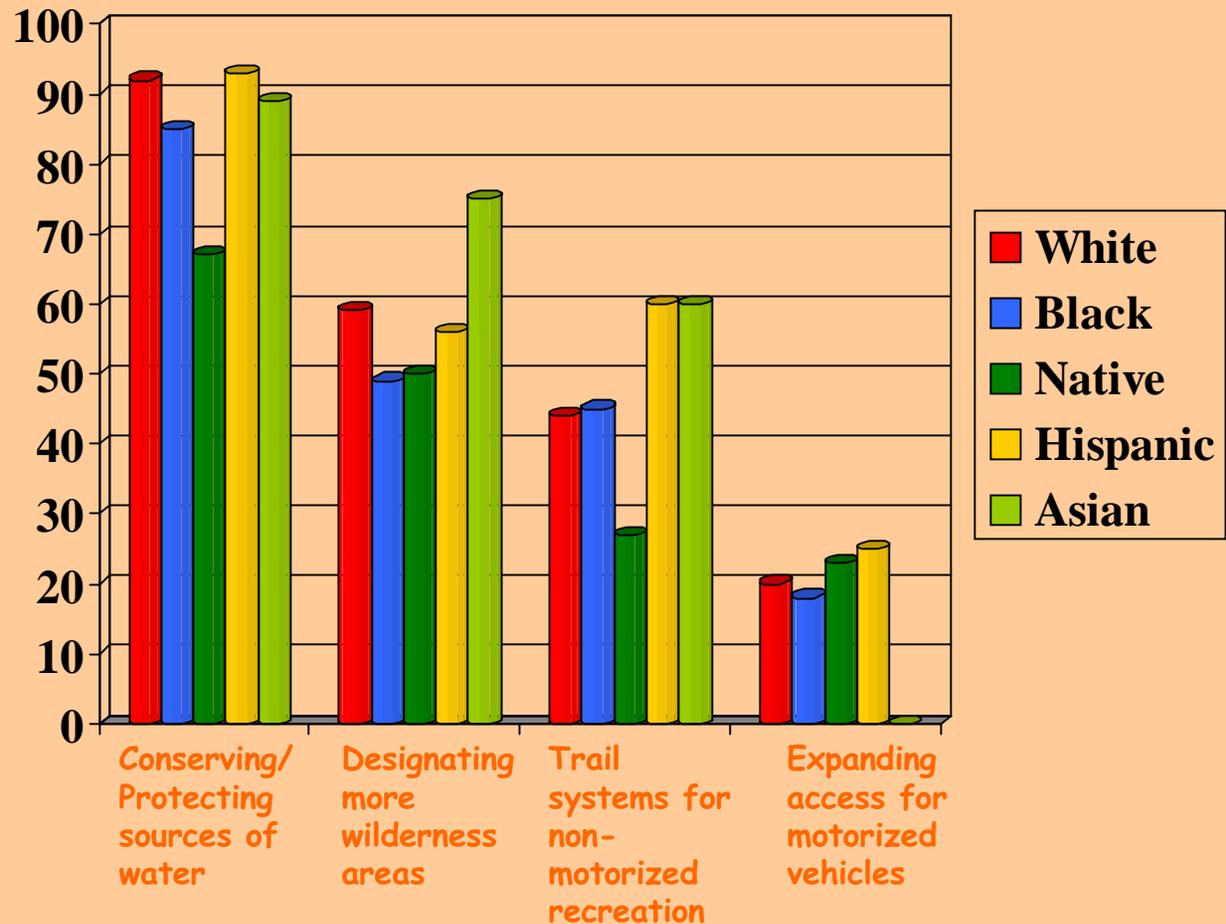
- ❖ Conserve and protect natural sources of water (91.4%)
- ❖ Better information for users, such as respect for wildlife and trail etiquette (87.2%)
- ❖ Protect natural ecosystems and wildlife habitats (86.0%)
- ❖ More use of volunteers for resource protection and improvement (85.6%)
- ❖ Better information for users about use impacts (81.1%)
- ❖ Consistent policy for guiding resource uses and management (76.0%)



Public Land Management Objectives LEAST Desired by the Public

- Develop more trails for motorized uses (28.9%)
- Expand commercial recreation uses (28.2%)
- Make special use permits easier to get (27.3%)
- Trade public lands for private lands to consolidate public holdings (22.1%)
- Expand access to motorized vehicles (19.8%)
- Develop more paved roads (19.2%)

COMPARING IMPORTANCE OF PUBLIC LAND OBJECTIVES BETWEEN ETHNIC GROUPS



Some Selected Values Concerning Public Lands

	Percentage Strongly Agreeing				
	North	South	Great Plains	Rocky Mtns	Pacific Coast
People should be more concerned about how our public lands are used	85	87	76	78	81
Future generations should be as important as current ones in decisions about public lands	78	74	73	61	74
People can think public lands are valuable even if they do not actually go there themselves	76	76	79	63	69
Wildlife, plants, and humans have equal rights to live and grow	62	65	54	62	60

Source: NSRE/Shields VOBA Module

**WILDERNESS
ATTITUDES AND
VALUES**

Public Views on Wilderness

- Nationally about 1/2 of American's 16+ report knowing about the NWPS
- Only 4.4% feel we have put too many acres into the NWPS:
 - Not enough, 52.6%
 - About right, 26.9%
 - Too much, 4.4%
 - Not sure, 15.4%



What Americans Value About Wilderness

Wilderness Value

Percentage Saying It Is
Extremely Important **Slightly or Not Important**

Protecting air quality	58.4	1.5
Protecting water quality	55.9	1.5
Protecting wildlife habitat	52.7	3.1
Protecting endangered species	49.8	5.0
Legacy for future generations	49.1	3.1
Preserving unique ecosystems and genetics	44.3	5.1
Future option to visit	37.5	7.1
Just knowing it is preserved	36.9	6.4
Providing scenic beauty	35.4	5.5
Providing recreation opportunities	27.8	7.2
Providing spiritual inspiration	25.9	16.7
Undisturbed area for scientific study	23.9	11.6
Providing income for tourism industry	9.7	33.5

TOP 5 VALUES

- Protecting air quality
- Protecting water quality
- Protecting wildlife habitat
- Protecting T&E species
- Legacy for future generations
(By Majority Vote)

Lowest 4 Values

- Providing recreation opportunities
- Providing spiritual inspiration
- Using areas for scientific study
- Stimulate income for tourism industry

(All Ballots Counted)



Overflights

Banned 17%

Limited 70%

Not Banned or Limited 11%

Don't Know 2%

Snowmobiles

Banned 34%

Limited 55%

Not Banned or Limited 9%

Don't Know 2%



**Limit Visitors
If Too Crowded**

= 89%

**Limit Visitors
If Resources
Being Harmed**

= 95%



Should designate more Wilderness within Federal lands

Important/ Very Important

Urban

62%

Suburban

56%

Rural

47%



Should designate more Wilderness within Federal lands

Important/ Very Important

White

59%

Black

49%

Hispanic

56%

Asian

75%



Should designate more Wilderness within Federal lands

Important/ Very Important

North	66%
South	55%
Great Plains	50%
Rockies	59%
Pacific Coast	59%

Do Wilderness Visitors Feel Differently About the NWPS?

	Visit (38.9%)	Do Not Visit (61.1%)
Overflights should be banned	19.2%	22.1%
Overflights should be allowed	11.9%	10.5%
Not seeing others important	23.5%	18.5%
Not seeing others unimportant	42.3%	52.1%
Seeing management does not detract at all	64.1%	68.1%

NSRE 2000 and Marketing Research

- NSRE 2000 will ask knowledge, attitudes, sensitivities, uses, and values of wilderness across all of American society, from the Keys to the ANWR.
- Segment the public using differences in environmental attitudes, recreation participation patterns, lifestyles, demographics and region of the country
- Use significant factors in the design of tailored marketing and educational strategies.

Segmenting the American Public

- ❖ Education, outreach, involvement
- "Does one Size Fit All?"
- ❖ Outdoor Recreation Is a Path to Different Segments
- ❖ Eight Groups, Eight Lifestyles

The Urban
Beach Boys
(3.8%)

The Inactives
(22.0%)

Young
New England
Wind Surfers
(0.9%)

Segmenting for more effective interpretation and education

Nature
Lovers
(27.2%)

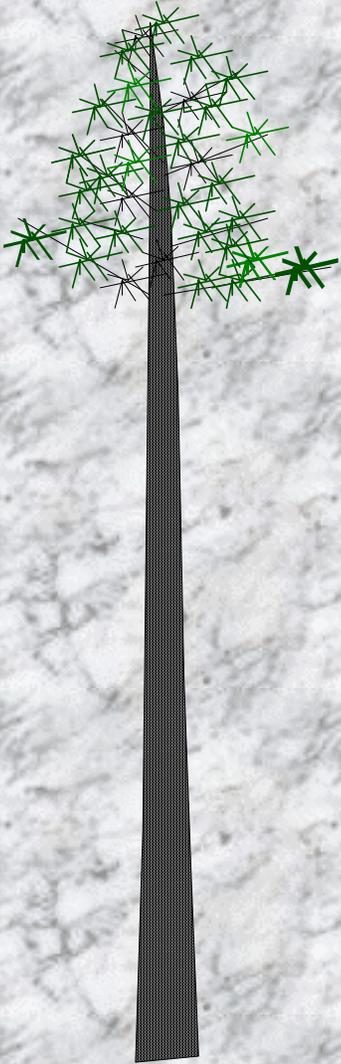
The Noreaster
Musclers (6.2%)

The Thrill
Seekers (8.3%)

Hunt-n-Fish
Men's Motor Club
(6.3%)

The Take it Easies
(25.3%)

Nature Lovers (27.2%)



- ❖ Viewing/photographing birds, flowers, wildlife, fish, natural scenery, and gathering mushrooms and berries, and learning in nature centers, visitor centers, historic sites and archeological sites
- ❖ Not into hunting, fishing, active sports or motorized activities
- ❖ 61 % female, mostly white, middle aged and seniors, not foreign born
- ❖ New England and Prairie states well represented
- ❖ Donate to civic or charitable organizations, spend time with grand children, invest, creative arts, collect things and garden, and read environmental magazines
- ❖ Aware of the NWPS, cross-section of American's values regarding wilderness, especially future options
- ❖ Believe humans are abusing the earth, the balance is delicate, and we are on a course for catastrophe

Hunt-n-Fish Men's Motor Club (6.3%)



- Hunt, fish, motorized, camp, motorboat, canoe
- Don't participate in beach activities or much in viewing/learning
- 88% male, 90% white, under 45, U.S. born, much more rural, Prairie and Southern
- Belong to wildlife conservation group, read nature magazines, woodworking, own a business, garden, have pets and do home improvements
- Believe Wilderness is there to use
- Humans were meant to rule over the earth and environmental crisis is exaggerated

The Urban Beach Boys (3.8%)

- ☞ Diving, Surfing, Snorkeling, Kayaking, Sailing, Backpacking, Snowboarding, Saltwater Fishing, Water Skiing, More active than most people in most activities, except hunting
 - ☞ Two-thirds white, Asian/Pacific Islanders well represented, majority under 35, U.S. born, and urban
 - ☞ South Atlantic and Pacific Coast
 - ☞ Regularly like to go to movies, use internet at home, participate in environmental groups, invest, and attend classes, involved as a youth volunteer, into the arts
 - ☞ Advocate wilderness preservation for option and existence values
 - ☞ Like most Americans feel humans are abusing the earth, we on a course for ecological catastrophe and the balance of nature is delicate
- 

Young New England Wind Surfers (0.9%)



- Wind surfing, surfing, kayaking, sailing, non-motorized winter activities, diving, snorkeling, rowing and canoeing
- More active than most Americans in all activities
- Over 805% white; two-thirds male; one half under 25; urban, U.S. born
- New England and Pacific Coast residents strongly represented
- Into movies, lifelong learning classes, participate with environmental groups, regularly attend movies, belong to a country club, on the internet and into the stock market
- Value preserving wilderness, especially for scientific and recreational values
- More strongly believe environmental crisis is greatly exaggerated, even though we are nearing the earth's limits

The Inactives

(22.0%)



- ✦ Not very active in outdoor activities, except for a bit of walking, family gatherings, and picnicking
- ✦ 55% female, blacks and Hispanic well represented, spread across age groups, mostly urban and U.S. born
- ✦ Spend time with grandchildren, cook at home, regularly attend religious services, collect things like coins and antiques
- ✦ Not much aware of NWPS, show a bit more support for using wilderness for recreation, tourism promotion, and science
- ✦ More strongly believe human ingenuity will insure the earth, humans were meant to rule over nature, humans can control nature, and the environmental crisis is exaggerated



The Noreaster Musclers (6.2%)

- Cross-country skiing, rowing, kayaking, canoeing, downhill skiing, sailing, backpacking, snowboarding, and fishing
- They don't hunt, but are active in most other activities
- Somewhat more male than female, white and Asian/Pacific Islander, young to middle aged (not seniors), urban, from New England, Prairie, Mountain and Pacific states
- Members of conservation groups, use the internet at home, attend concerts, have vacation property, invest, belong to a country club
- 2/3 aware of wilderness; back preservation, not use
- More belief that we are abusing the earth, the balance of nature is delicate and we may be heading for disaster

The Thrill Seekers (8.3%)



-  Waterskiing, jet skiing, rafting, snowmobiling, snowboarding, motorboating, downhill skiing, driving off-road, rowing and canoeing
-  Very active across a large number of activities
-  Equally male/female, white and American Indians well represented, two thirds under 35, almost all born in the U.S., from Plains states
-  Youth volunteers, belong to a country club, use the internet, attend movies, watch sports on TV, gather with friends and neighbors
-  Wilderness is a recreation resource, but also important for protecting wildlife and water quality
-  Balance of nature is delicate, humans are abusing the earth, and a disaster is looming

The Take it Easies (25.3%)

- ❖ Sightseeing, driving for pleasure, picnicking, visiting historic sites, family gatherings, visiting nature centers, and walking
- ❖ They don't ski, view/photograph, hunt, or fish
- ❖ More female than male, Blacks and Asian/Pacific Islander well represented, all ages, all regions
- ❖ Attend cultural events, go to movies and church, raise children and spend time with grandchildren, use the internet, and eat out
- ❖ Less aware of NWPS, lean toward using rather than preserving wilderness, except for water and air quality
- ❖ Believe humans can insure the liveability of the earth and the environmental crisis is exaggerated



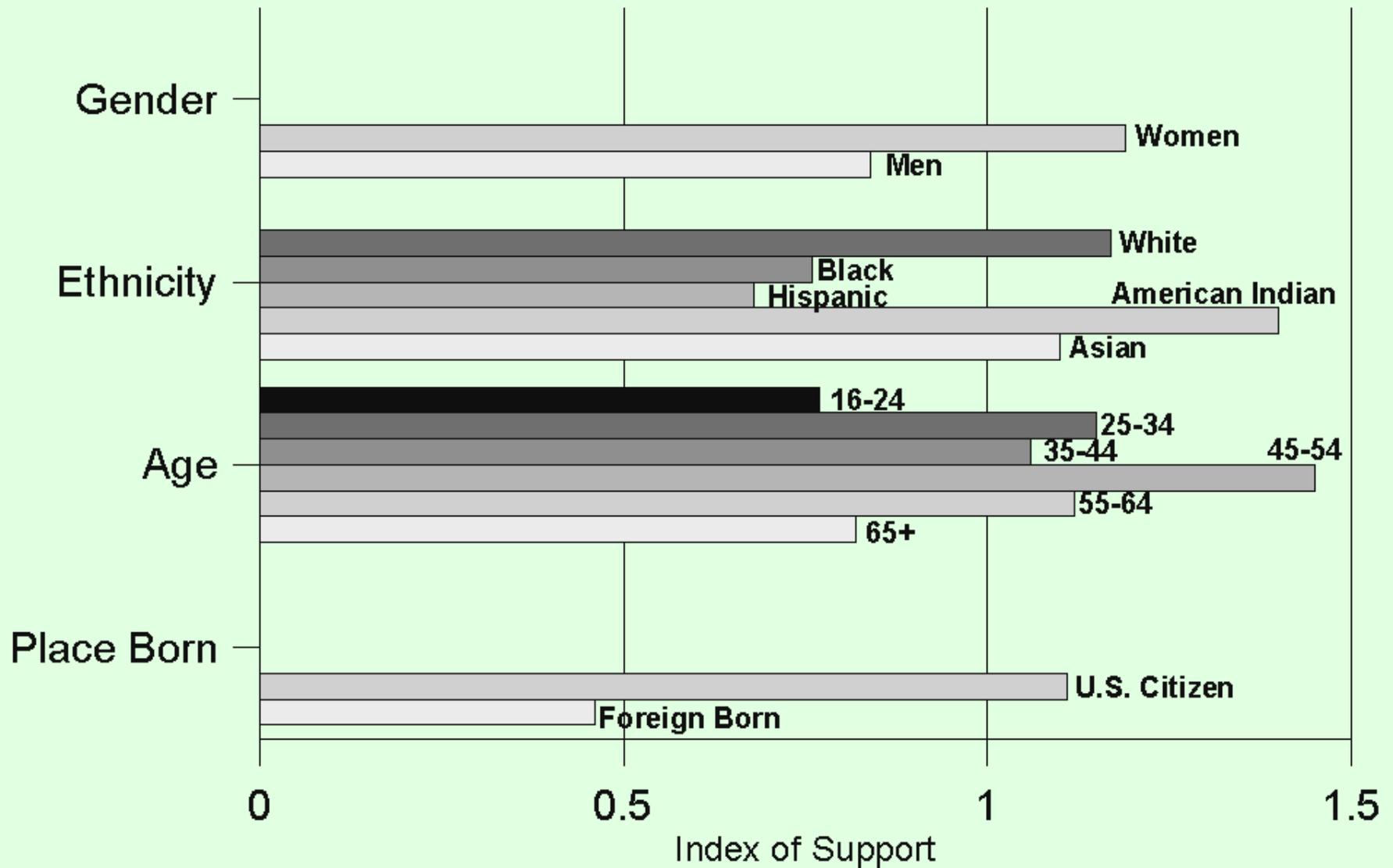
ACCOUNTING

FOR

DIFFERENCES

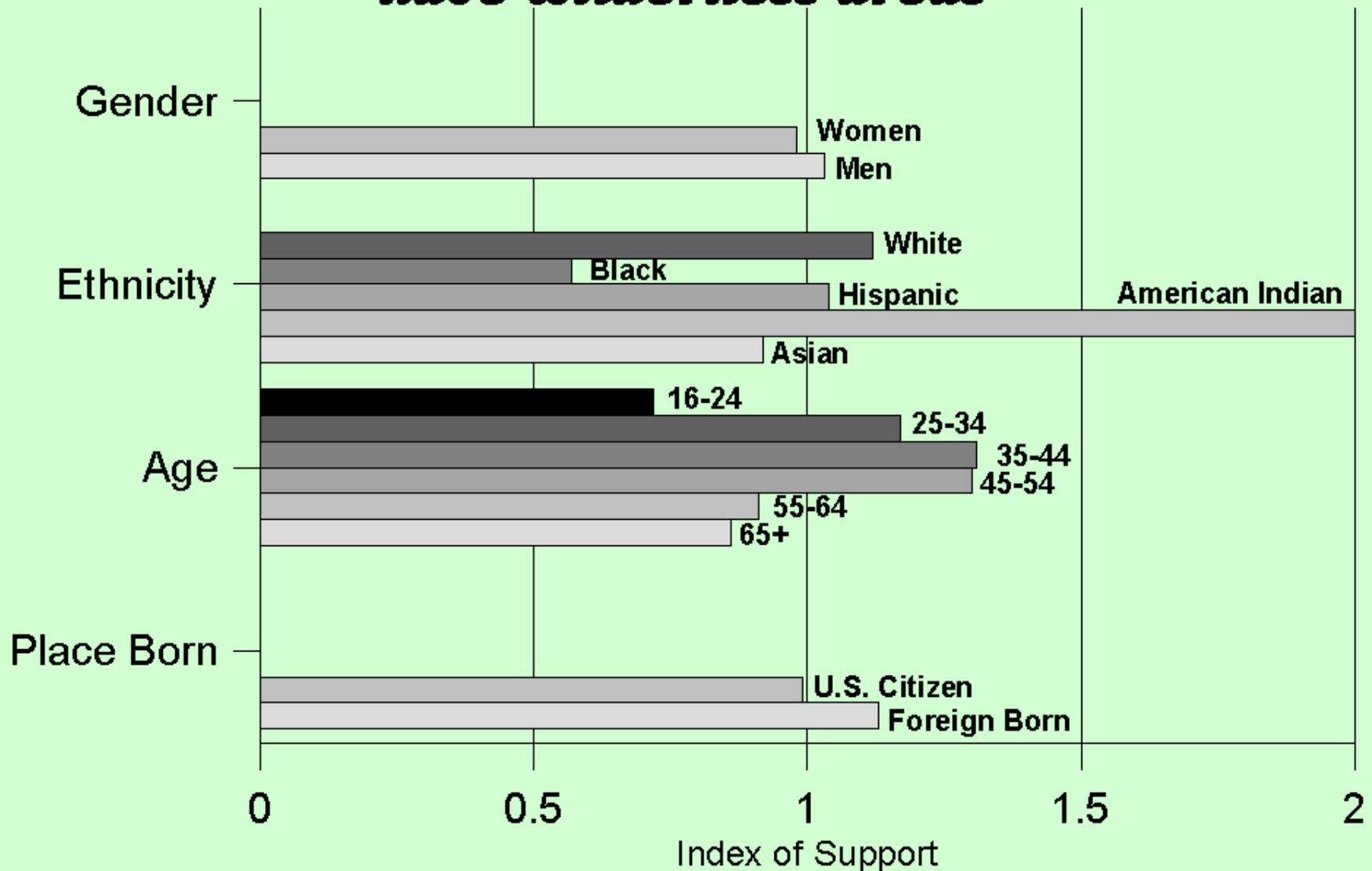
The Most Important Benefits of Wilderness

Protecting Water Quality



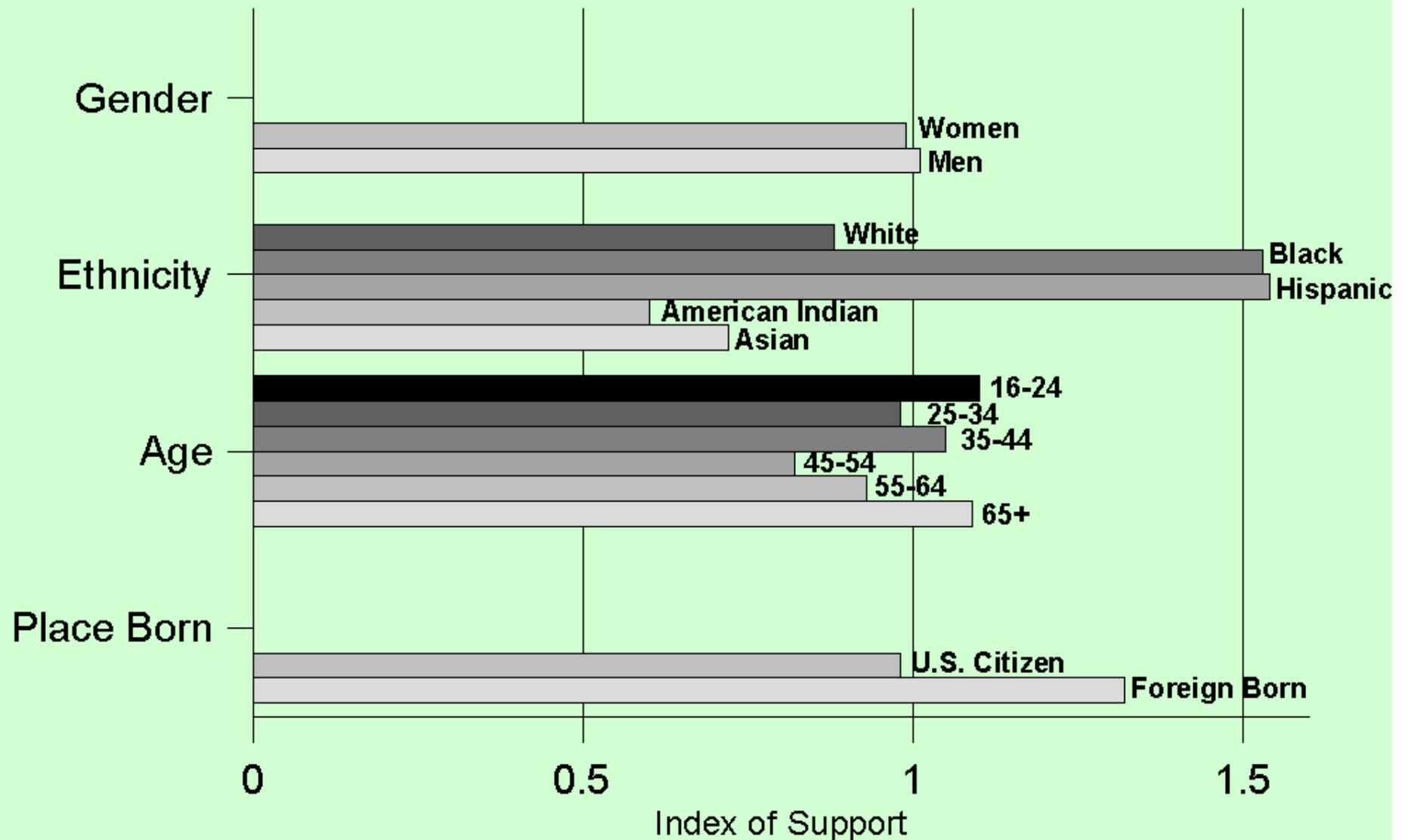
The Most Important Benefits of Wilderness

Knowing that future generations will have wilderness areas



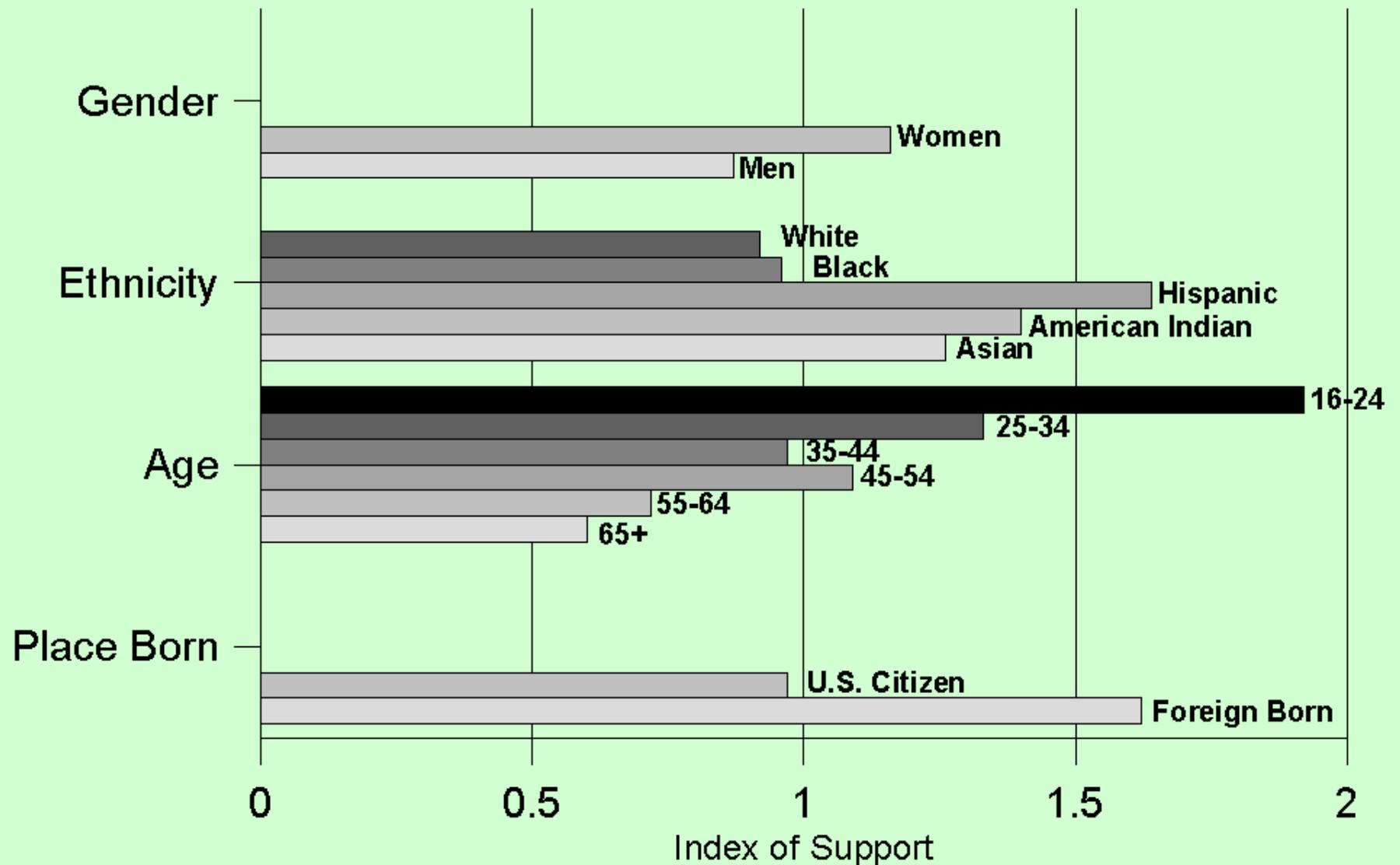
The Most Important Benefits of Wilderness

Providing recreation opportunities



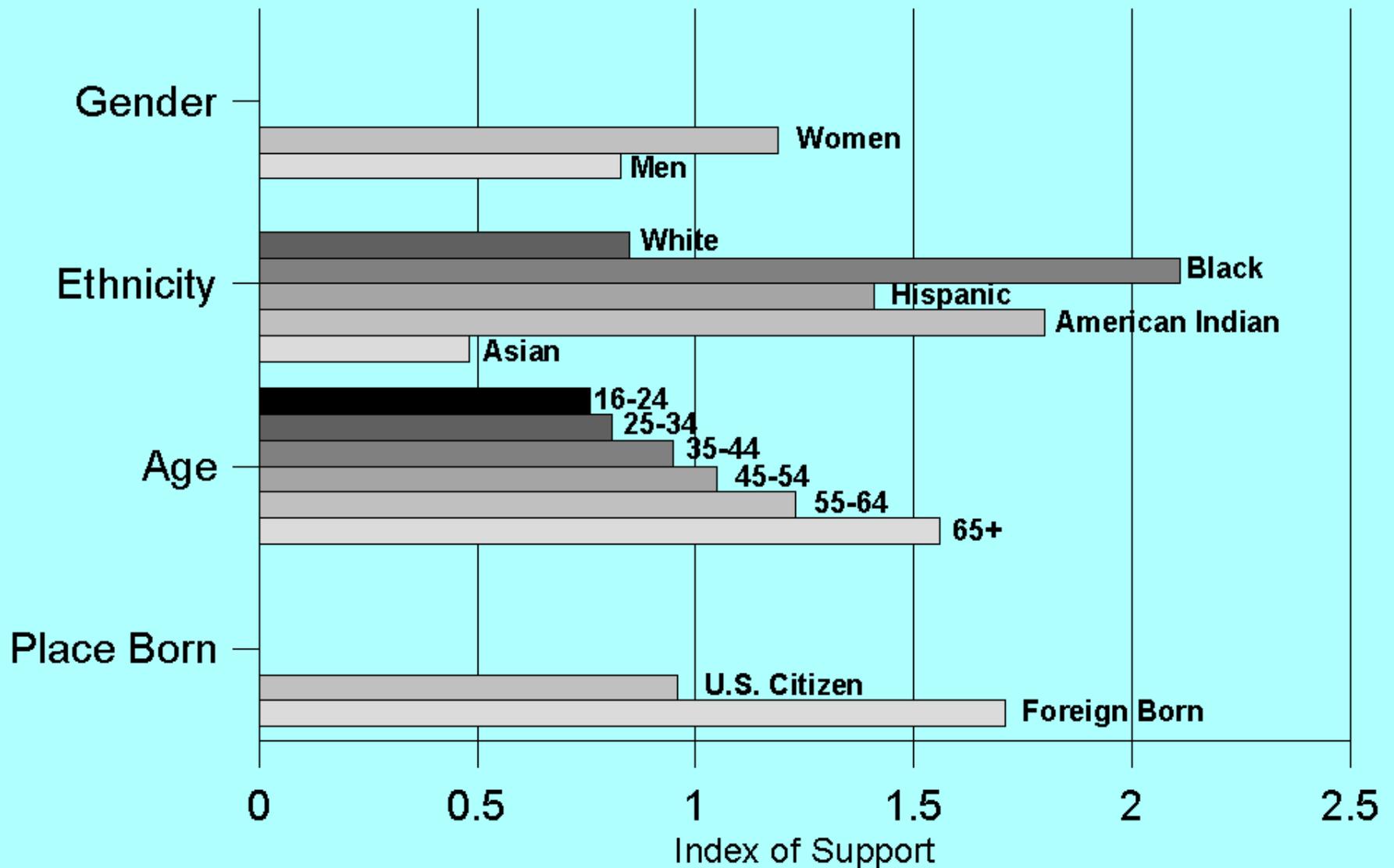
The Most Important Benefits of Wilderness

Protecting wildlife habitat



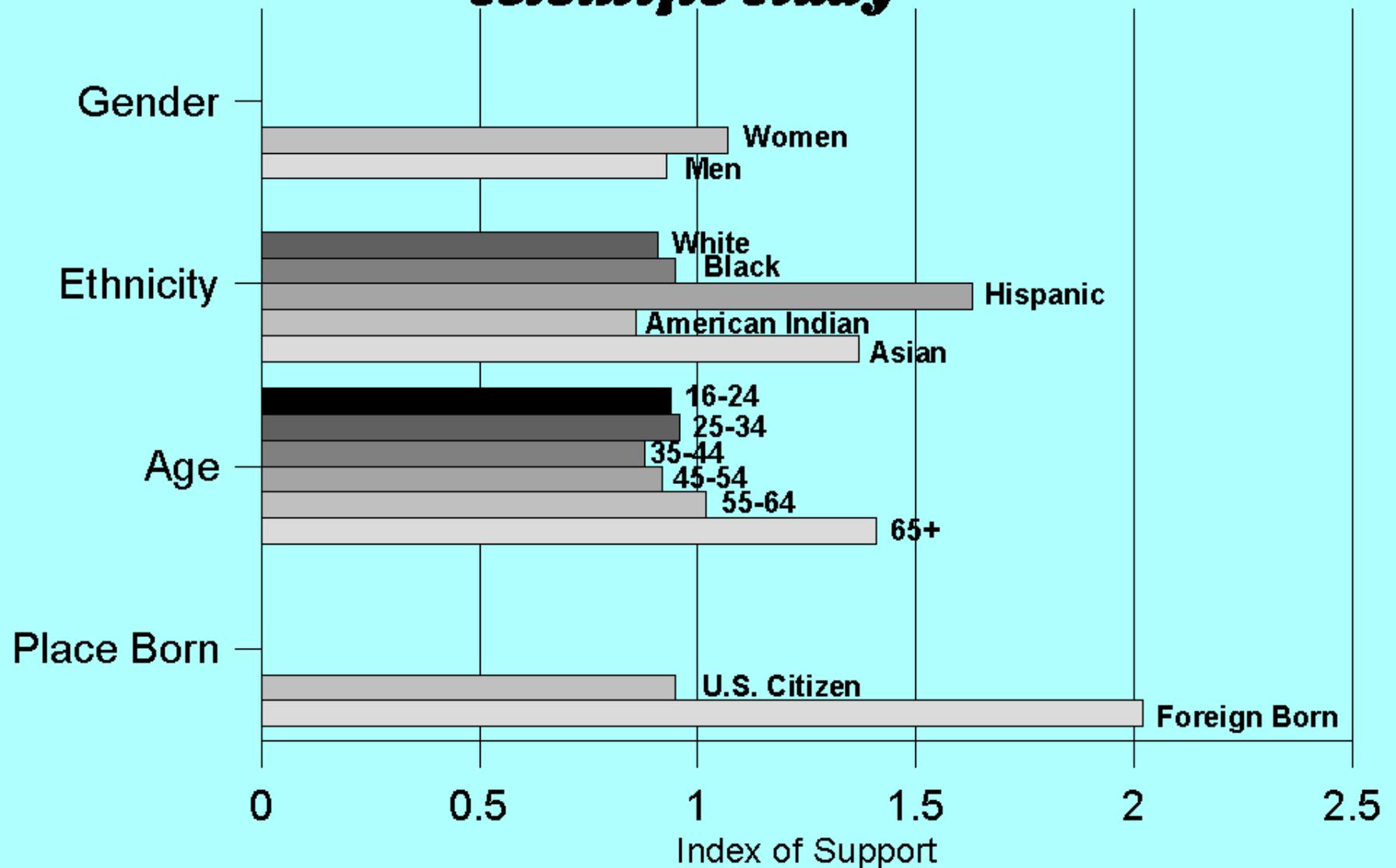
The Most Important Benefits of Wilderness

Providing spiritual inspiration



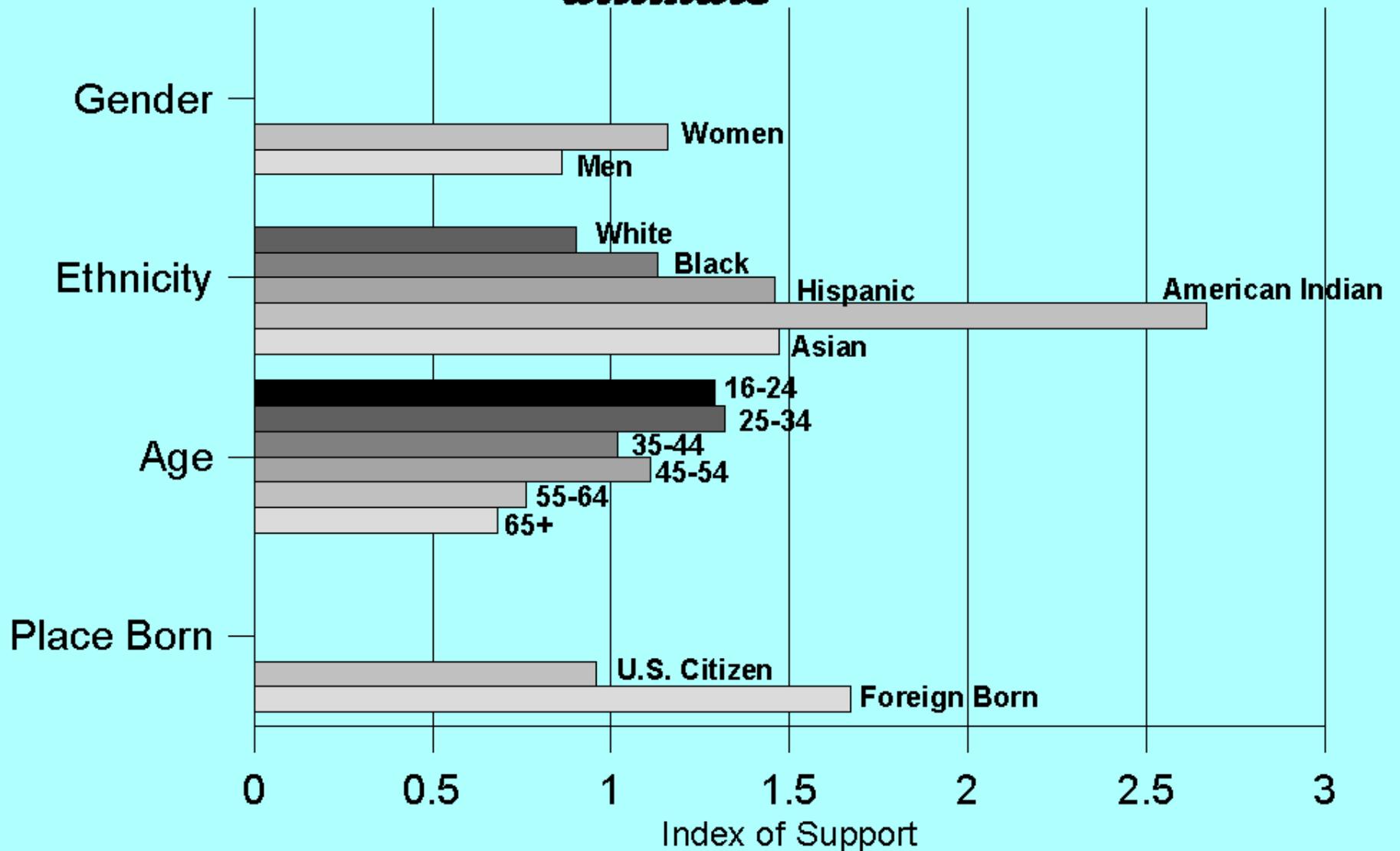
The Most Important Benefits of Wilderness

Preserving natural areas for scientific study



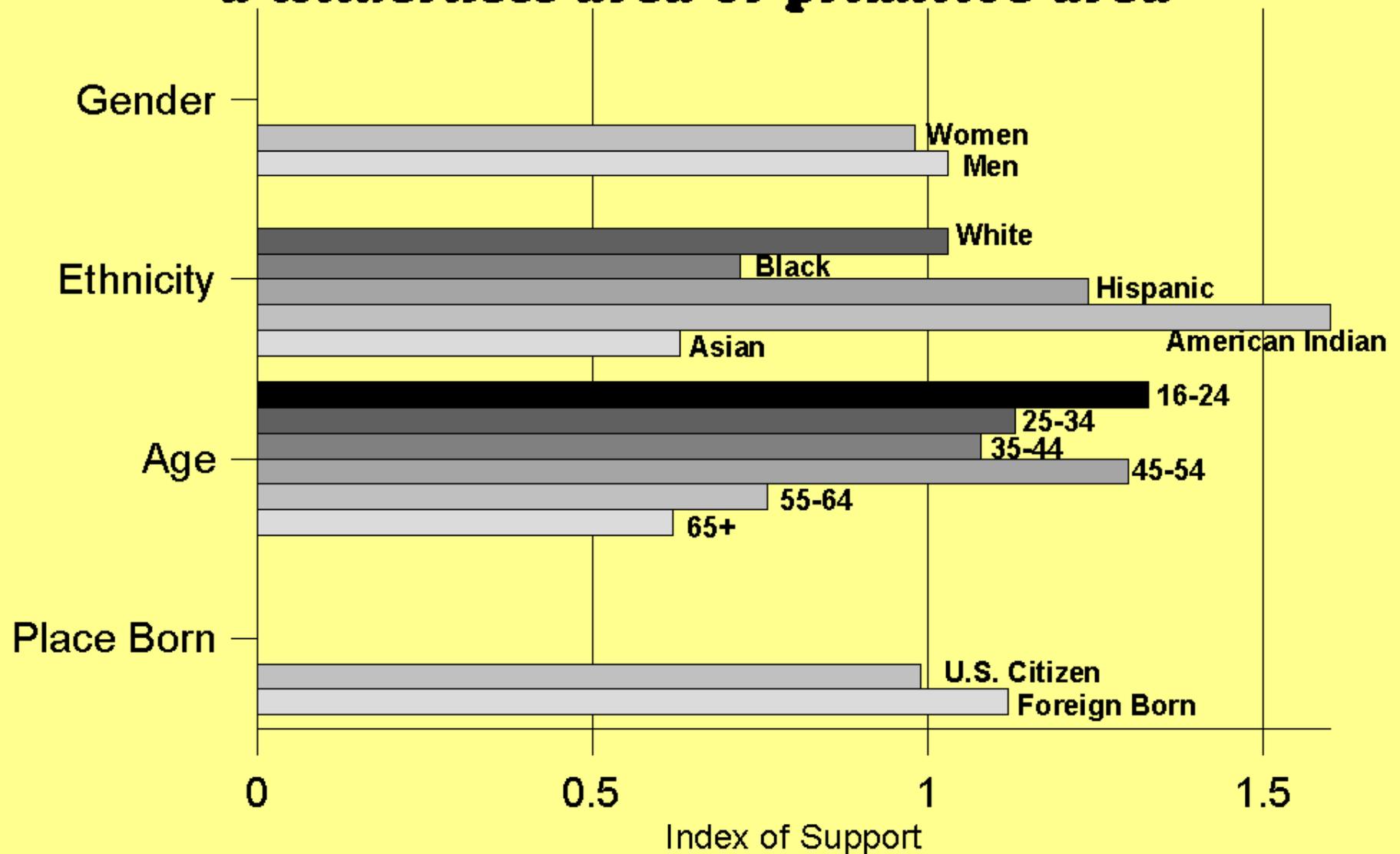
The Most Important Benefits of Wilderness

Preserving unique wild plants and animals



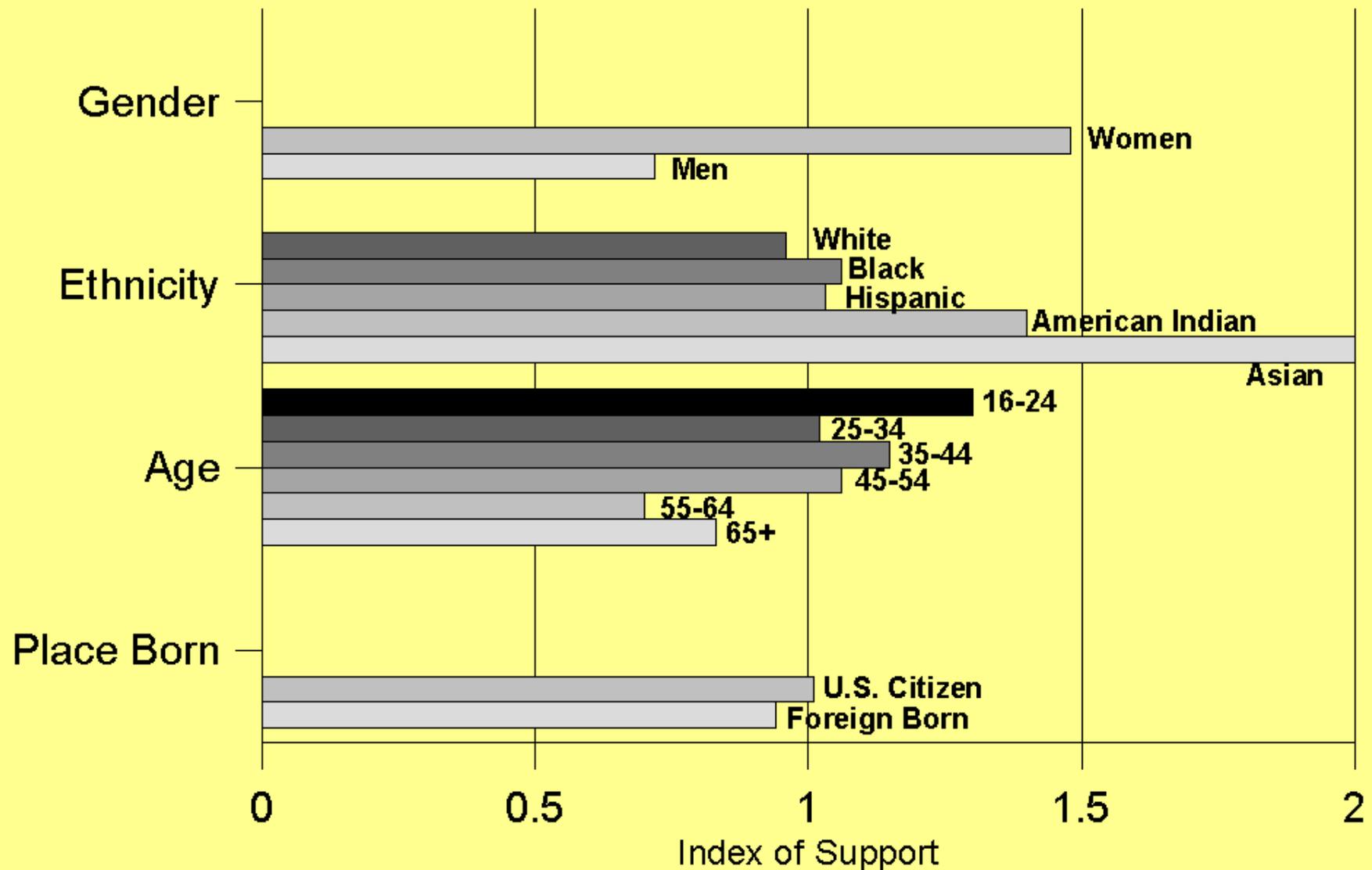
The Most Important Benefits of Wilderness

Knowing I will have future option to visit a wilderness area or primitive area



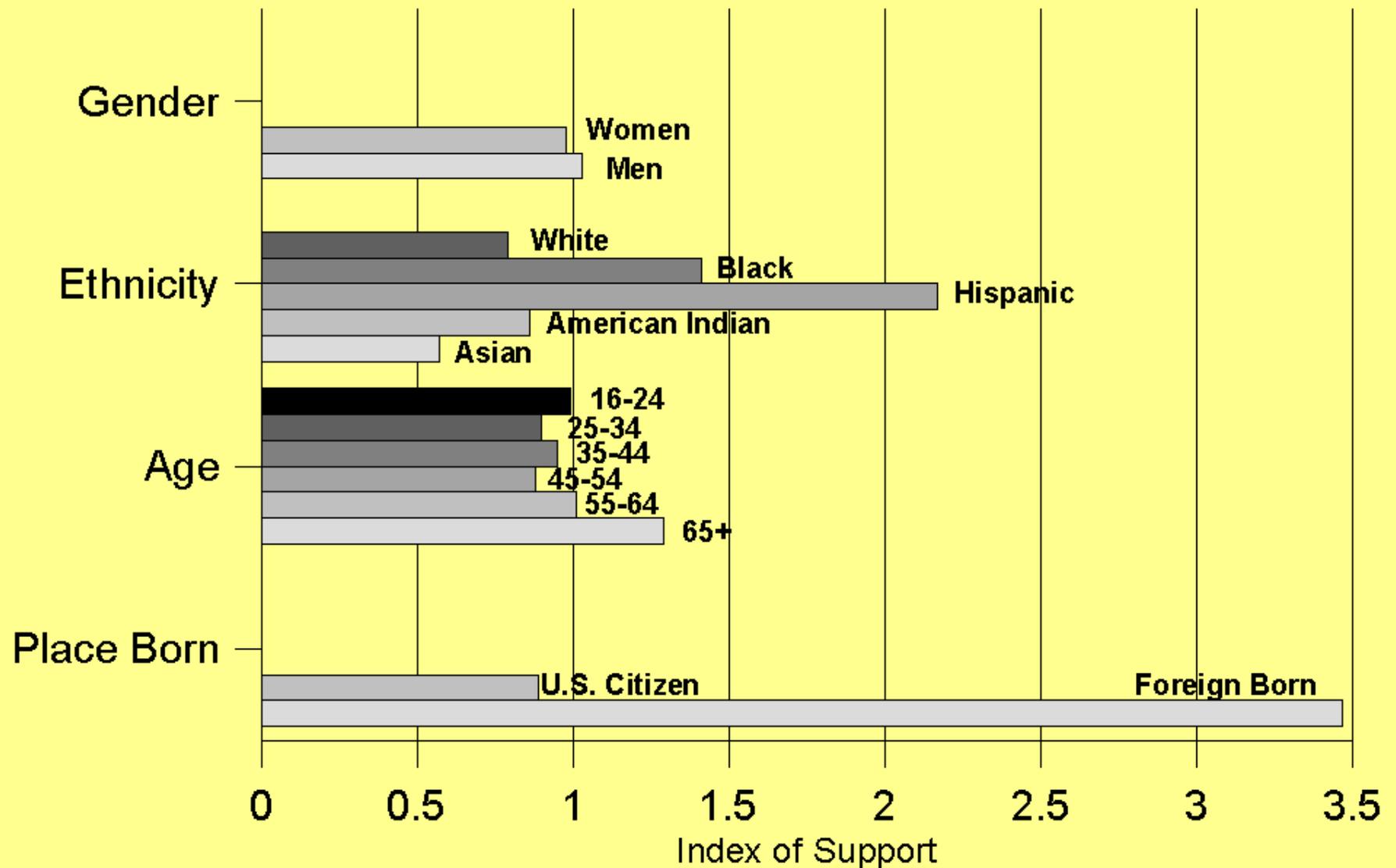
The Most Important Benefits of Wilderness

Protecting air quality



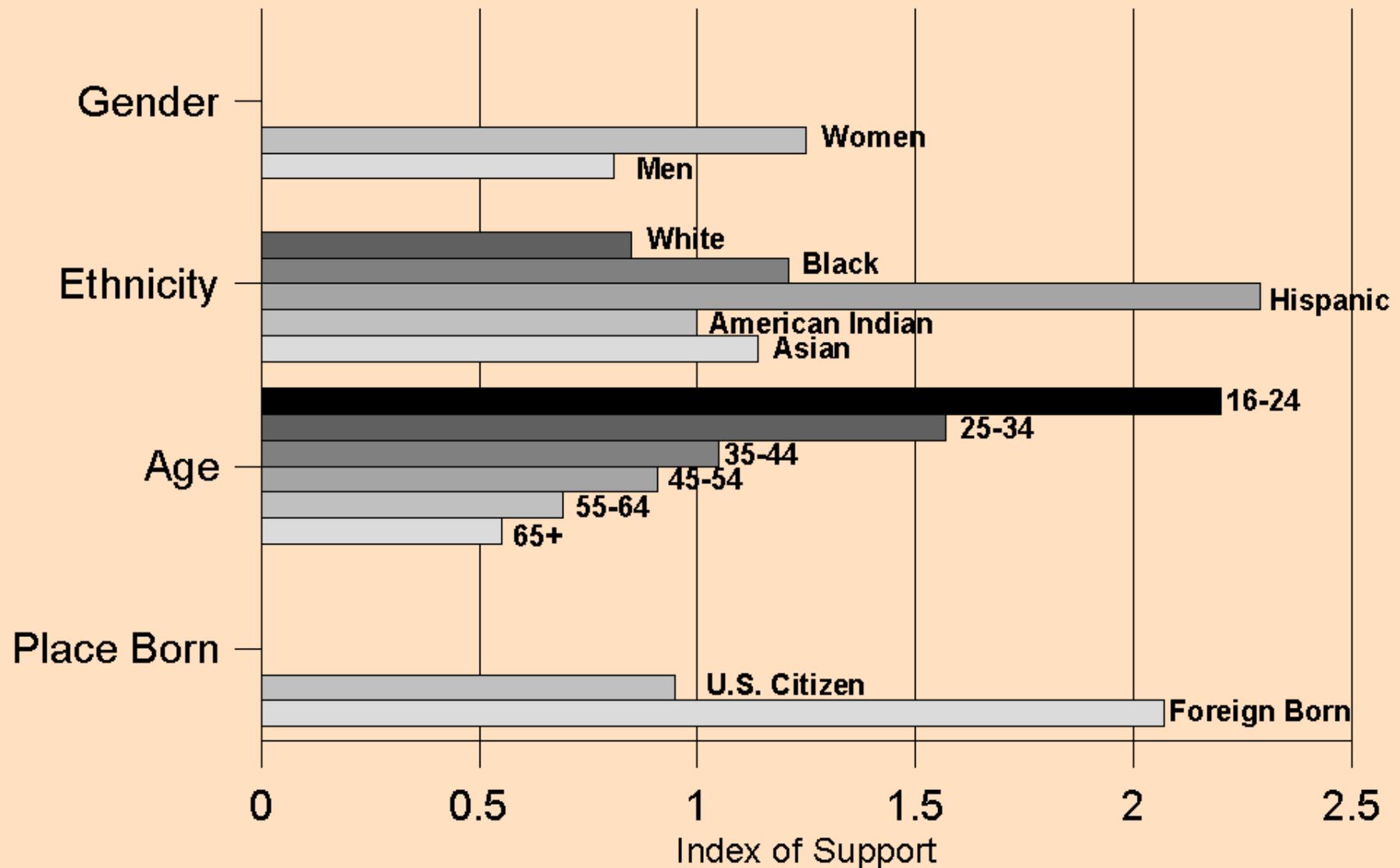
The Most Important Benefits of Wilderness

Providing income for the tourist industry



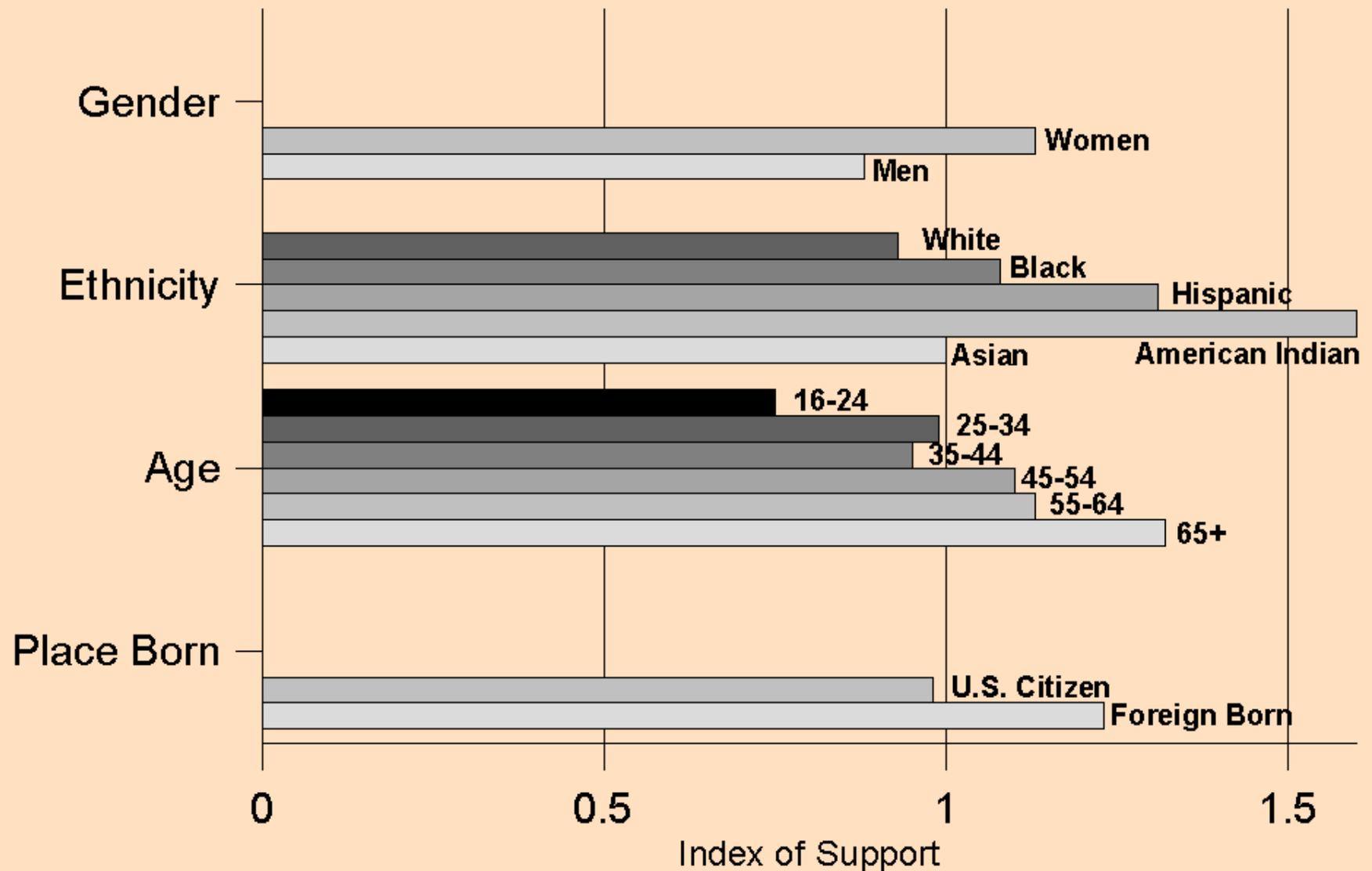
The Most Important Benefits of Wilderness

Protecting rare and endangered species



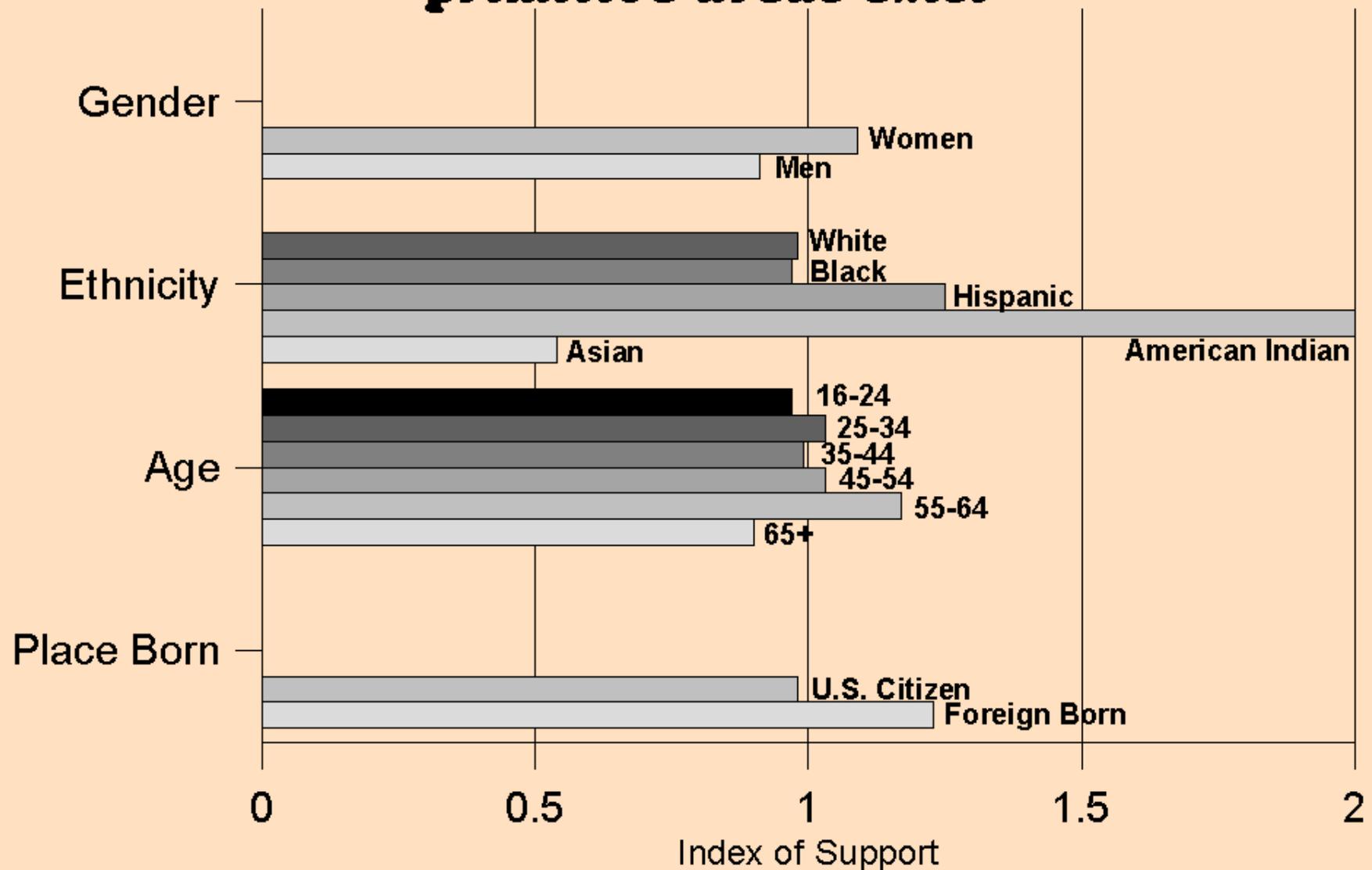
The Most Important Benefits of Wilderness

Providing scenic beauty



The Most Important Benefits of Wilderness

Just knowing that wilderness and primitive areas exist





✓ ***Americans Support
and Value Wilderness***

✓ ***How do we account
for those values?***

Better Understanding the Value of Wilderness

What are the values and the value of sustainably managed Wilderness?

- **With TWS, national workshop of thought leaders convened to define a Framework of Wilderness Values**
- **From NSRE 2000, identified the benefits from Wilderness that people value most**
- **Beginning development of estimates of economic and non-economic values within the Framework**
- **Providing estimates of NF and hopefully System-wide recreational use of wilderness**

NATIONAL WORKSHOP ON WILDERNESS VALUES:

Conceptualize a multidisciplinary ***Wilderness Values Framework*** that includes use and non-use values, contemporary and future.

Summarize our ***state of knowledge*** about Wilderness values.

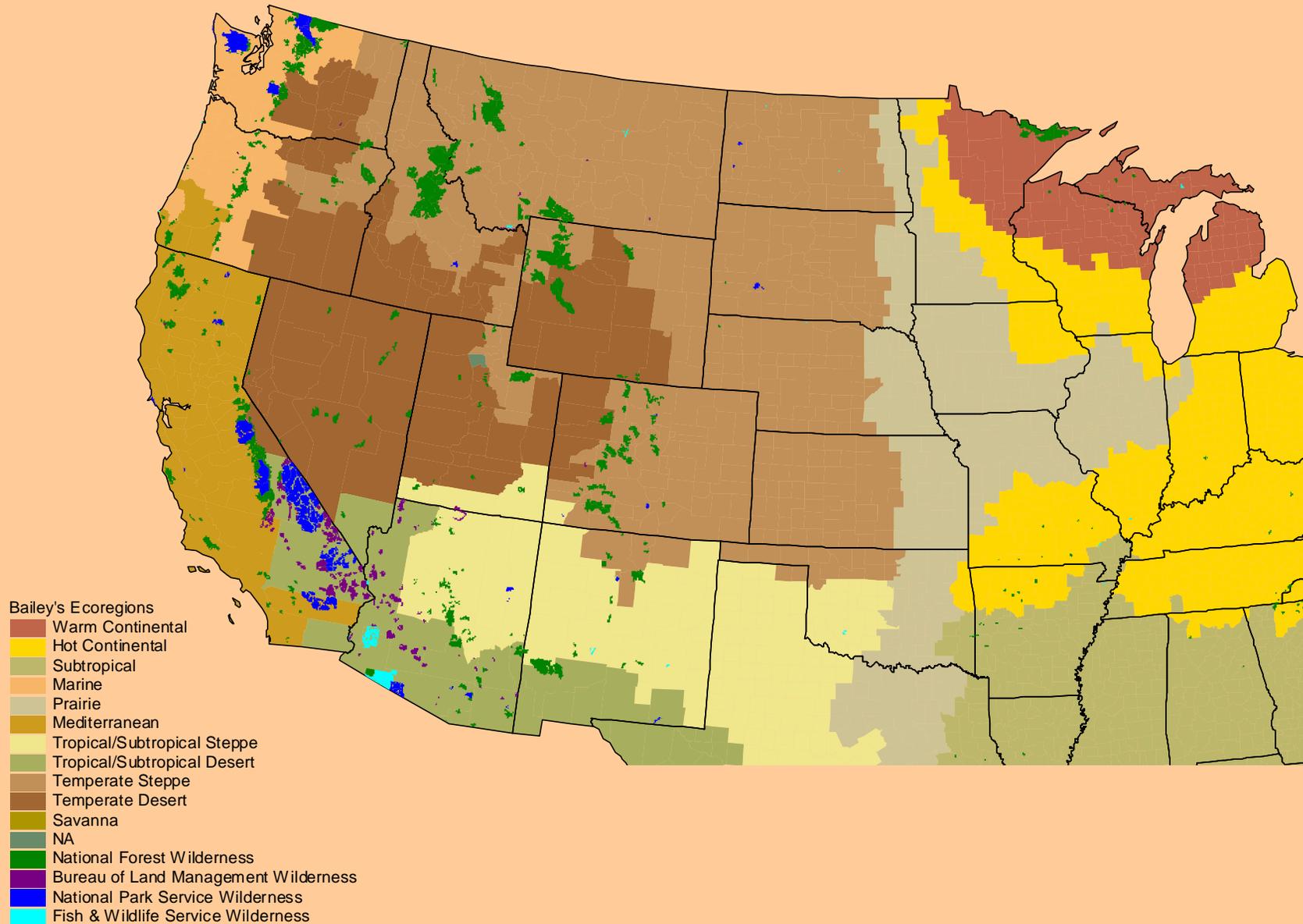
Propose an ***agenda of research*** to improve our understanding of Wilderness values and to fill gaps in science.

Population Growth

And

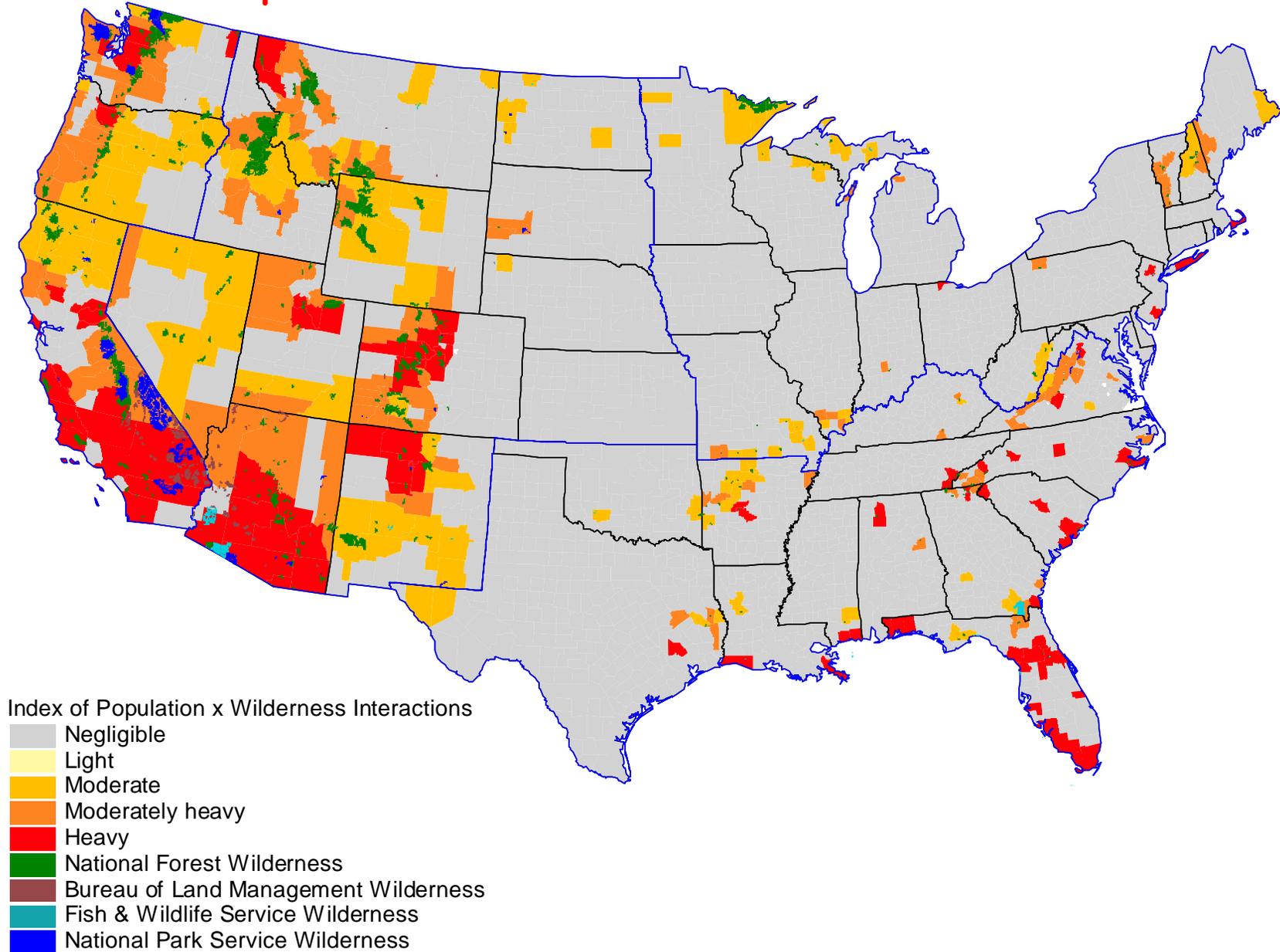
***The Future of
Wilderness***

Wilderness Protection for Remaining Wild Portions of the Nation's Ecosystems

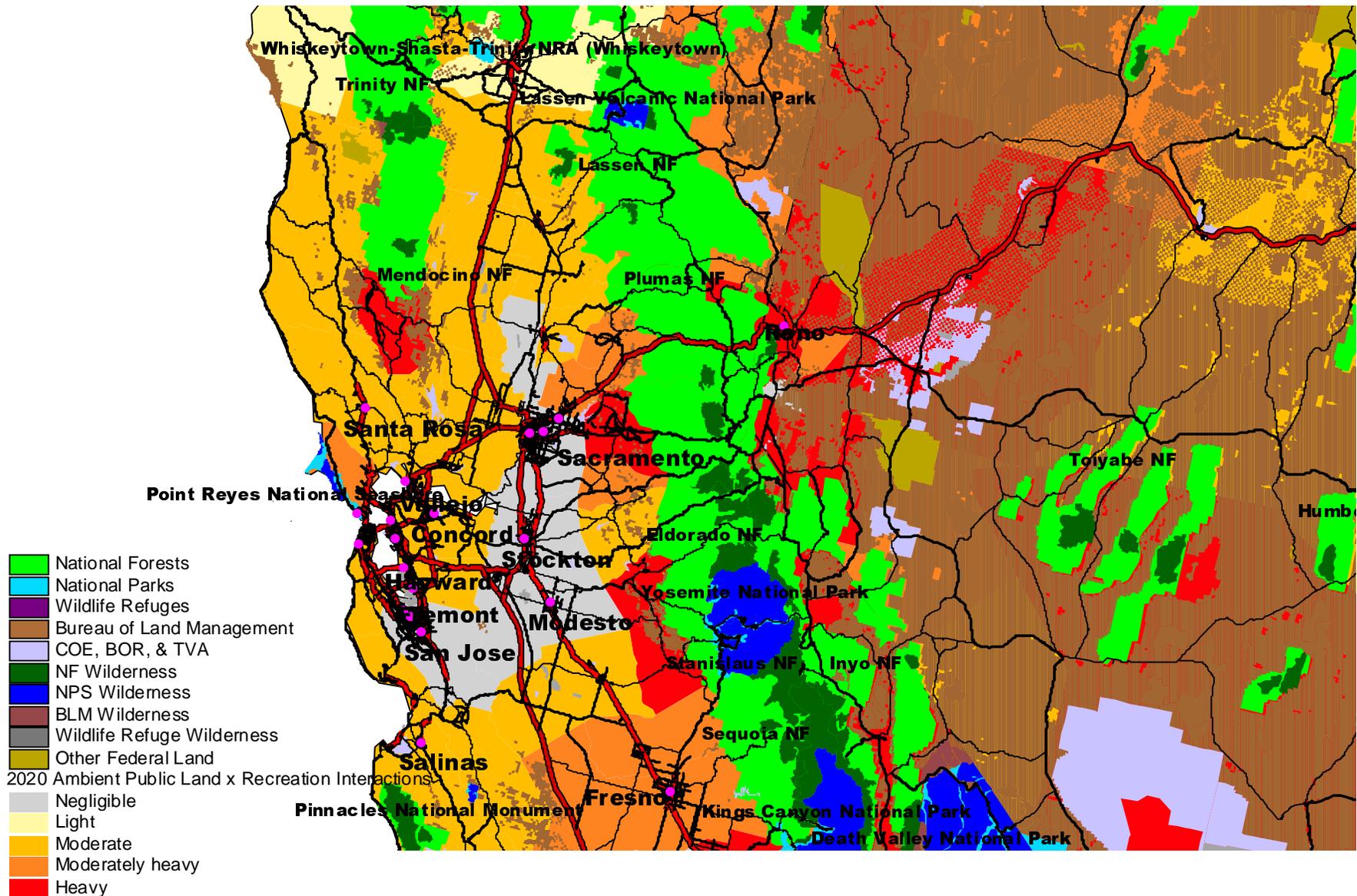


Future Wilderness Hotspots (2020)

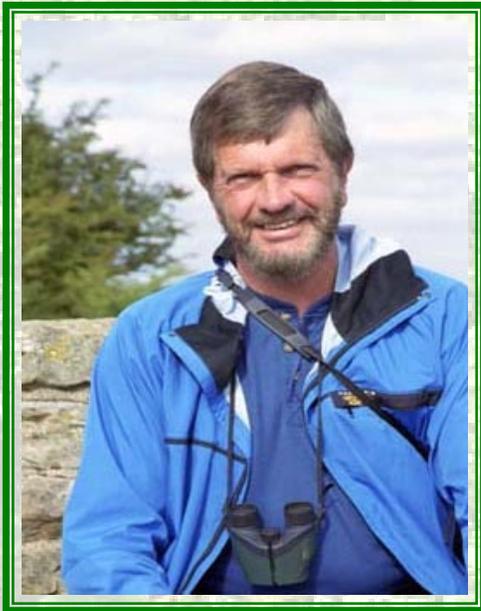
Population Pressures on Areas with Wilderness



Public Lands in Central California and Projected Recreation Demand Hotspots, 2020



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**Ken Cordell
Senior Scientist
Forest Service
Research
Athens, GA**

www.srs.fs.fed.us/trends

kcordell@fs.fed.us

Graphics by Shela Mou