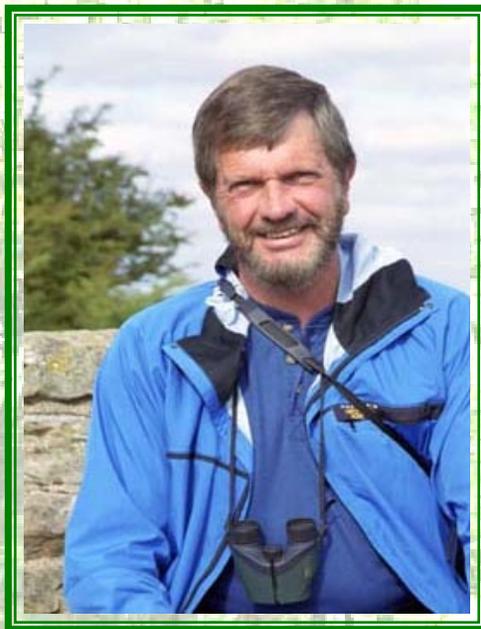


**KNOWING THE PUBLIC'S  
POSITION ON WILDERNESS:  
A Necessary Component of  
Wilderness Management**



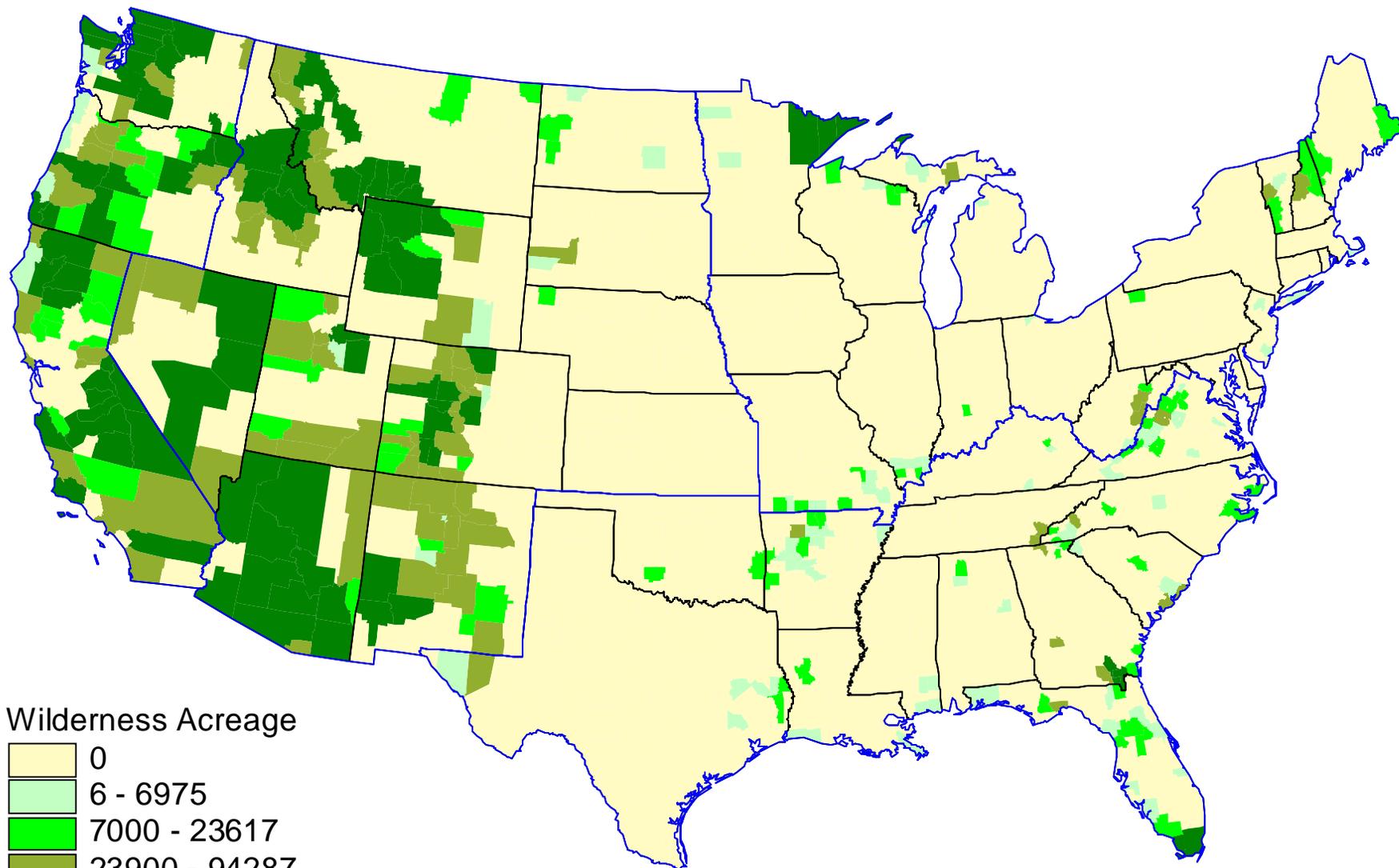
**Ken Cordell  
Senior Scientist  
Forest Service  
Research  
Athens, GA**

**[www.srs.fs.fed.us/trends](http://www.srs.fs.fed.us/trends)**

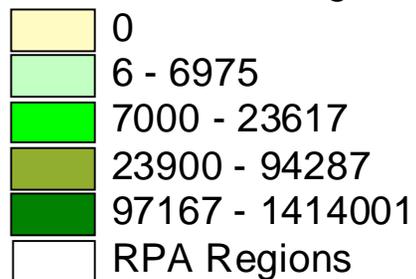
**[kcordell@fs.fed.us](mailto:kcordell@fs.fed.us)**

**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:

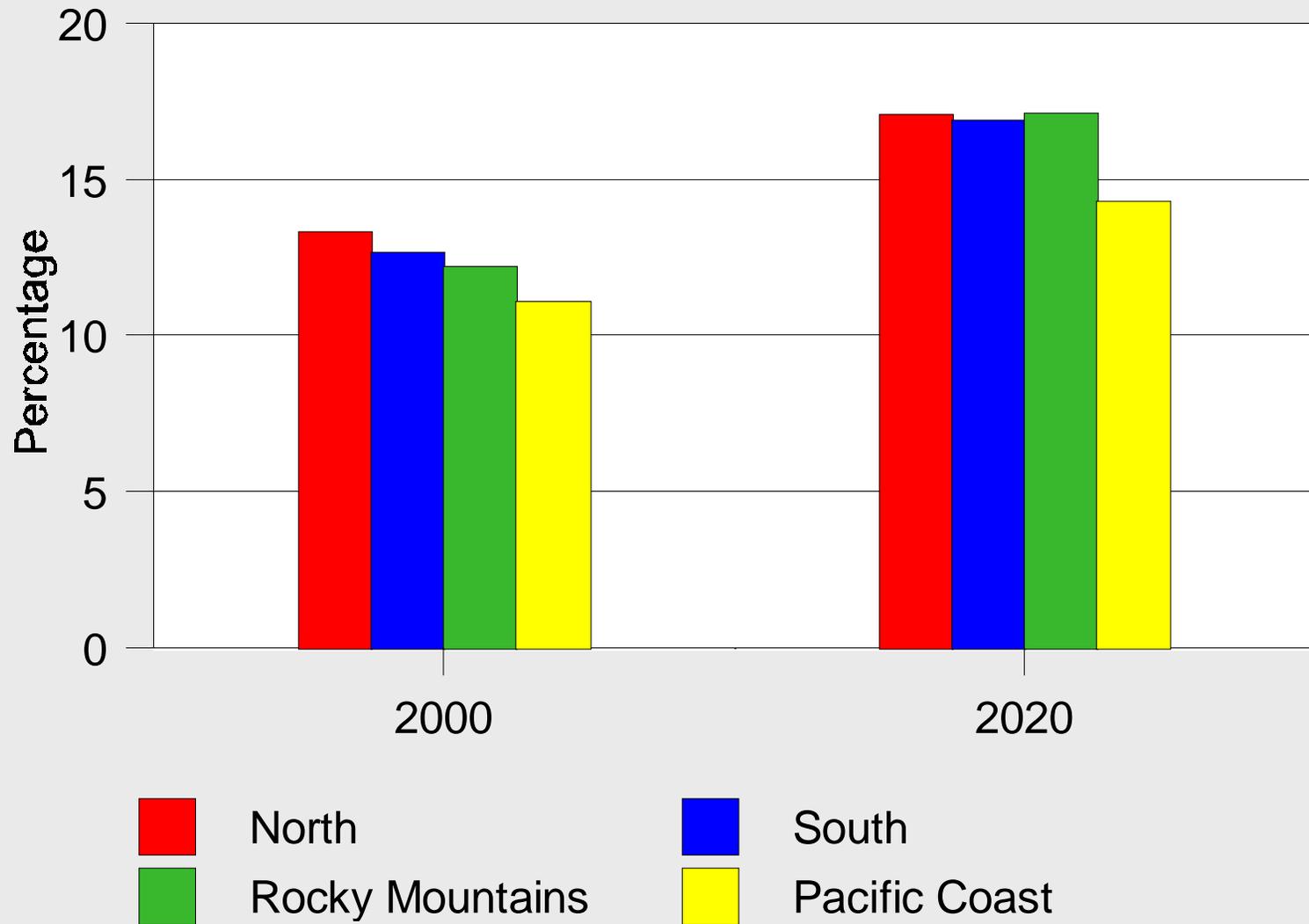
1990	248 mm
2000	275 mm
2020	325 mm
2050	404 mm
2075	481 mm
<b>2100</b>	<b>571 mm</b>

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

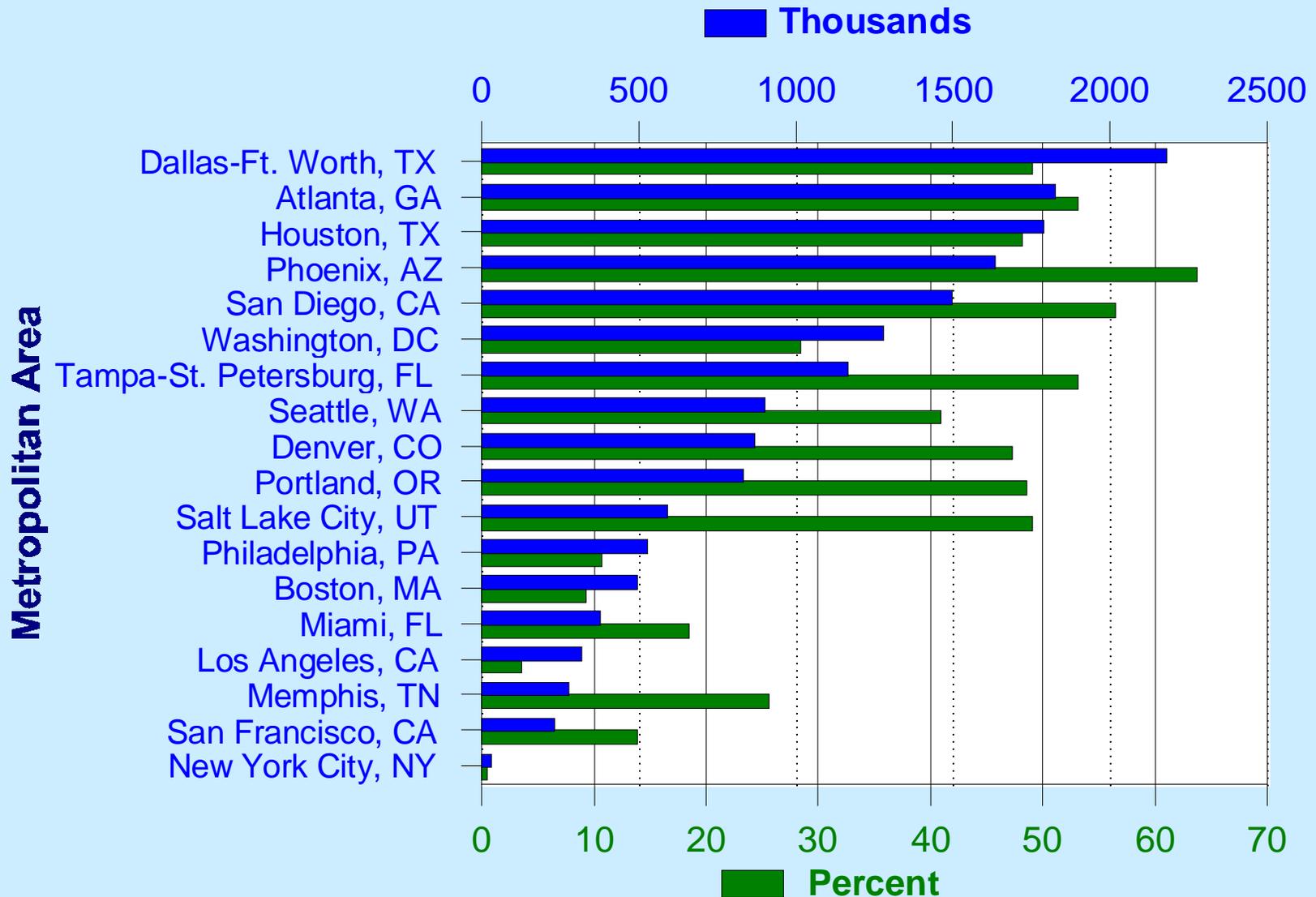
➤ Changing ethnicities by 2050:

Anglo Americans	76%	50%
African Americans	12%	15%
Hispanic Americans	<b>9%</b>	<b>21%</b>
Asian Americans	<b>4%</b>	<b>11%</b>

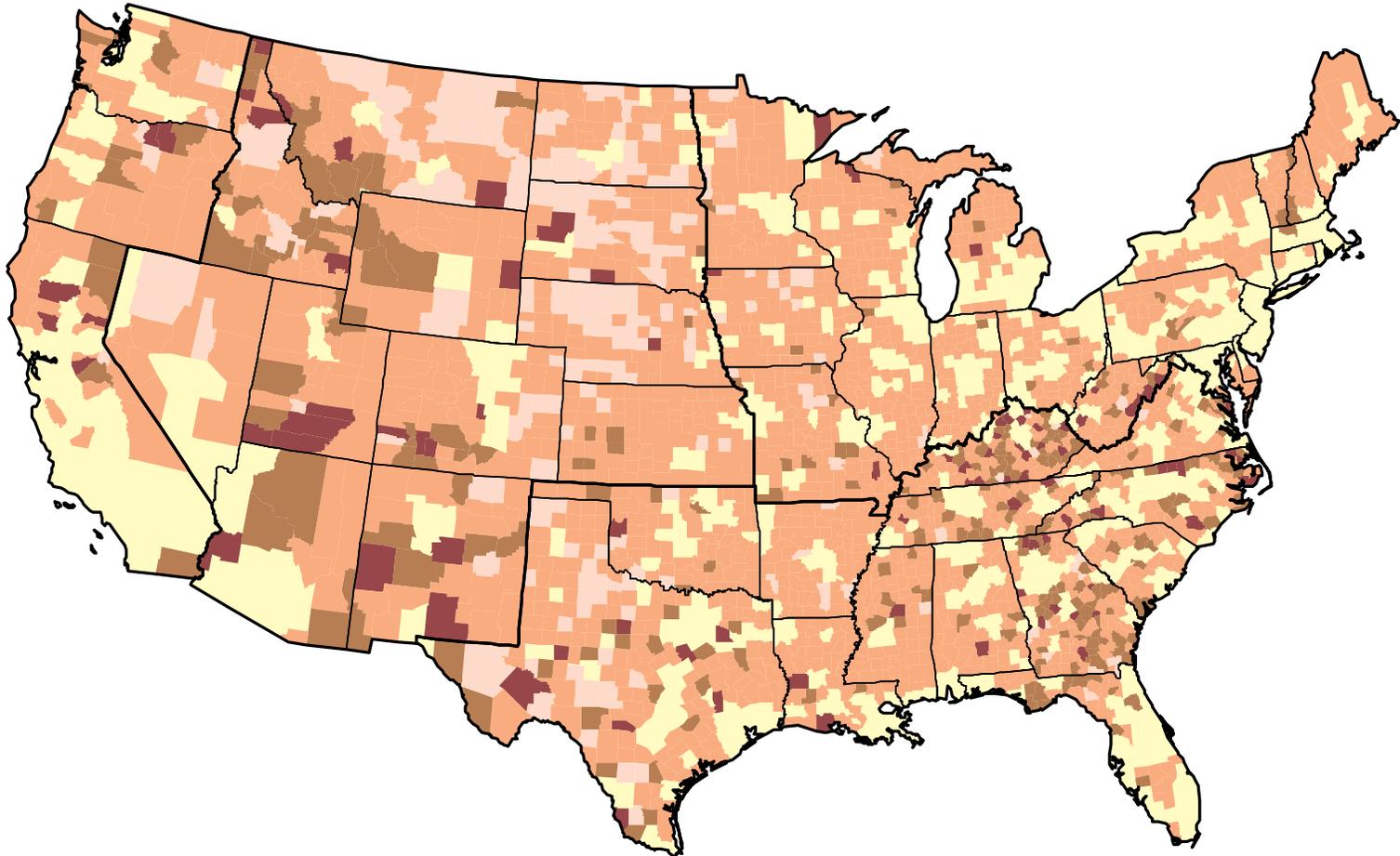
# The Proportion of our Population Over Age 65 Is Growing in All Regions



# The Major Metropolitan Areas are Growing, Some Very Rapidly (1995-2020)



# Rural Land is Being Converted to Urban and Built-up Uses Rapidly (1987-1997)



Percent Area Change to Urban/Built-up Uses

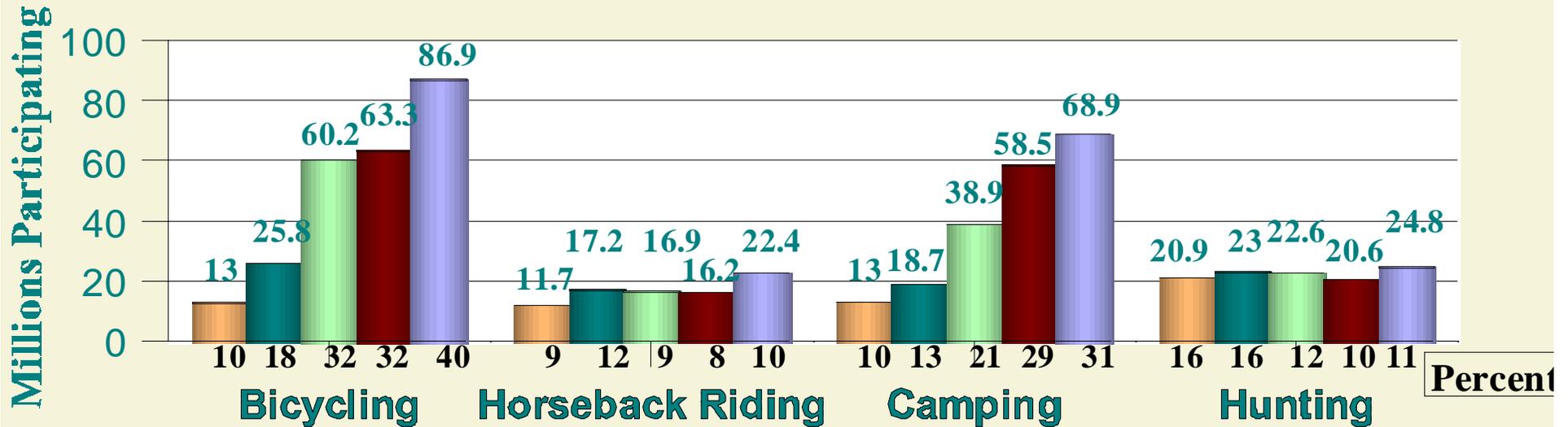
- 0
- 0.1 - 50
- 50.1 - 100
- 100+
- Metropolitan Counties

Percentage Change to Urban/Built-up Acres by Region and Conterminous U.S.

North	8.8
Pacific Coast	19.5
Rocky Mountain	10.4
South	18.8
Conterminous U.S.	13.9

# Long-Term Trends - Land

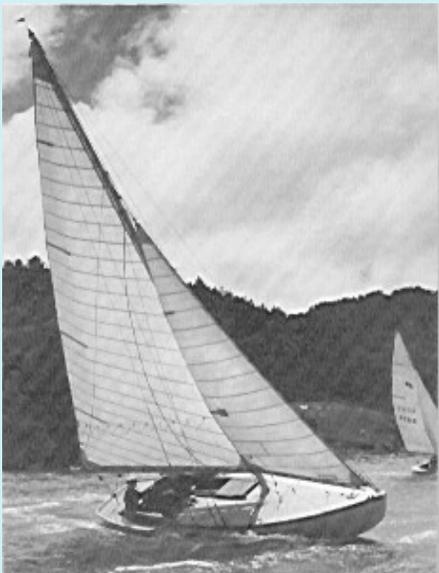
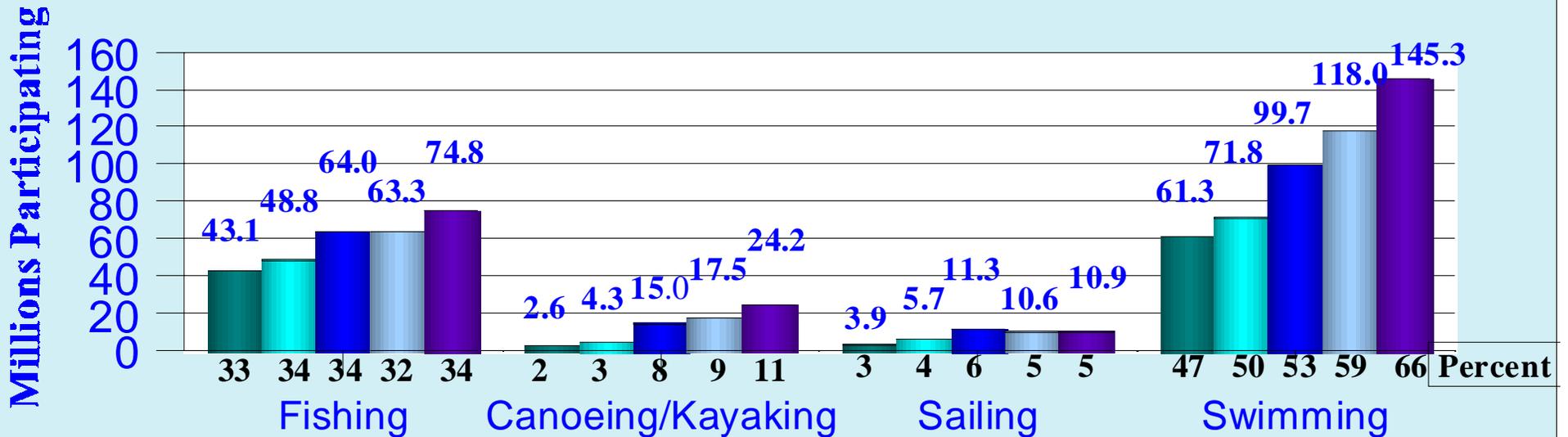
(12 or older)



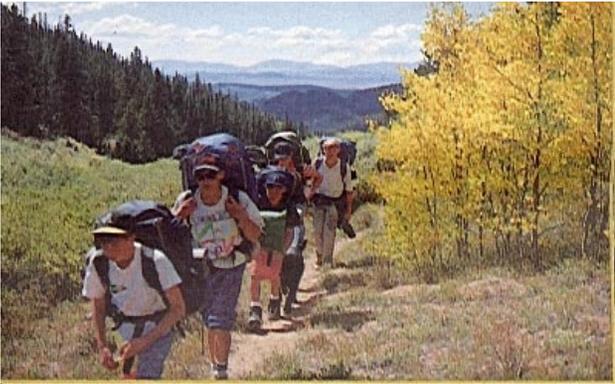
- 1960 (131 million)
- 1965 (144 million, 10% more)
- 1982-83 (188 million, 44% more)
- 1994-95 (216 million, 65% more)
- 1999-2000 (220 million, 68% more)

# Long-Term Trends - Water

(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 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

# 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

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

**NSRE**

***NATIONAL SURVEY ON  
RECREATION AND THE  
ENVIRONMENT***

***SINCE 1960***

***THE UNITED STATES' ON-GOING  
NATIONAL RECREATION SURVEY***

***Gary Green, NSRE Manager, 706-559-4269***

# 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 and Tourism
- Environmental Attitudes and Values
- Vision, Values and Objectives for Management of Public Lands
- **Wilderness Values, Knowledge, Visitation, and Preferences for Management**
- Ownership of Private Land
- Lifestyles, Demographics and Disabilities



# **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**

**WE CAN ADDRESS THE  
QUESTION OF WHETHER  
WILDERNESS STILL  
APPROPRIATE BY  
LOOKING AT A NUMBER  
OF SOCIAL DIMENSIONS**

**PART OF THE  
ANSWER LIES IN  
ENVIRONMENTAL  
ATTITUDES**



# Voting on the Most Important Issue

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

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**“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**

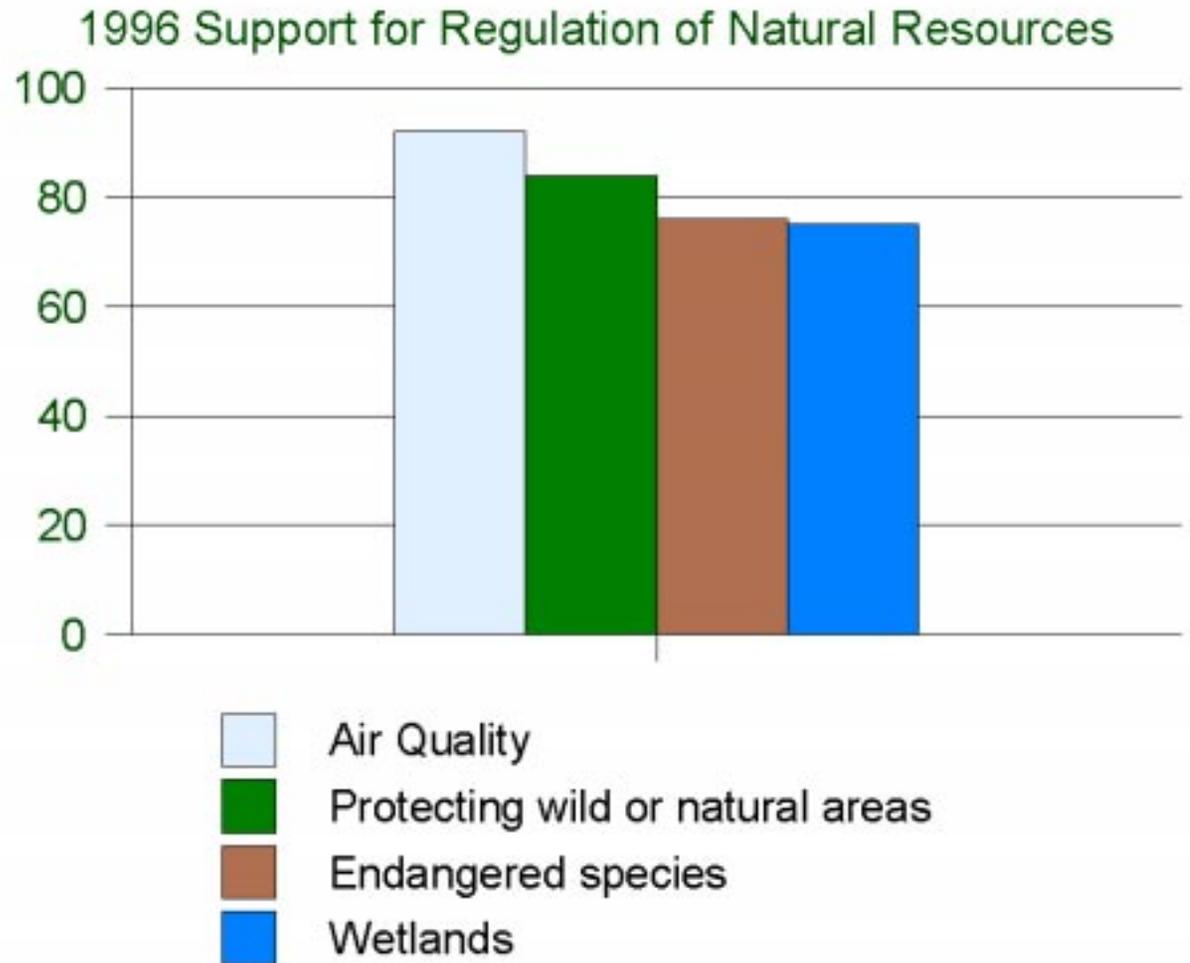
# Spending on the Environment

---

<b>Too Much</b>	<b>7%</b>
<b>Too Little</b>	<b>49%</b>
<b>About Right</b>	<b>28%</b>
<b>(Don't Know)</b>	<b>(15%)</b>

---

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



Source: Dujack, 1997.

***Another Part of  
the Answer Lies  
in Public  
Preferences for  
Our 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%)

**FINALLY, THE  
ANSWER LIES IN  
PUBLIC'S  
WILDERNESS  
ATTITUDES AND  
VALUES**

# ***We Americans Like Wilderness***

---

- 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%

# ***We Value Most the Naturalness of Wilderness***



## **Wilderness Value**

	<b><u>Extremely Important</u></b>	<b><u>Slightly or Not Important</u></b>
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

# Lowest 4 Values

---

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

(All Ballots Counted)

# TOP 5 VALUES

---

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



## **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%**

# **Building Greater Awareness and Support for Wilderness**

- NSRE asks 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 communication and education

Nature  
Lovers  
(27.2%)

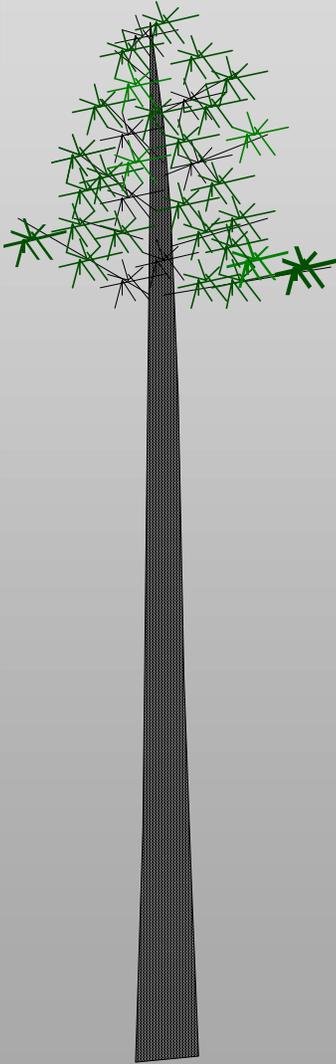
The Noreaster  
Musclers (6.2%)

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, and **not into boating**
- ❖ 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
- ❖ 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%)



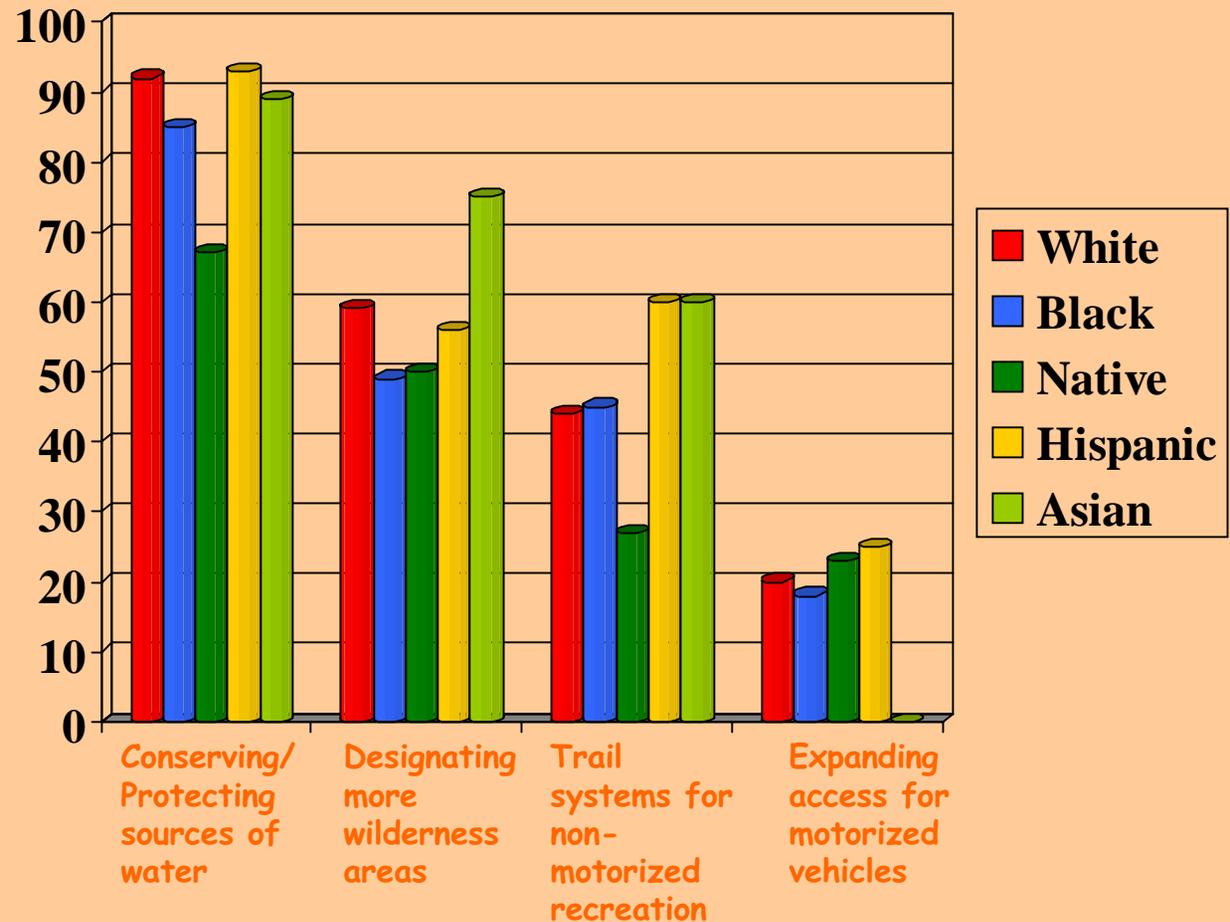
- Hunt, fish, motorized, camp, motorboat, canoe
- Don't participate in beach activities or much in viewing/learning
- 88% male, 90% white, under 45, U.S. born, much more rural, Prairie and Southern
- Belong to wildlife conservation group, read nature magazines, woodworking, own a business, garden, have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

***ACCOUNTING***

***FOR***

***DIFFERENCES***

# COMPARING IMPORTANCE OF PUBLIC LAND OBJECTIVES BETWEEN ETHNIC GROUPS





# ***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**

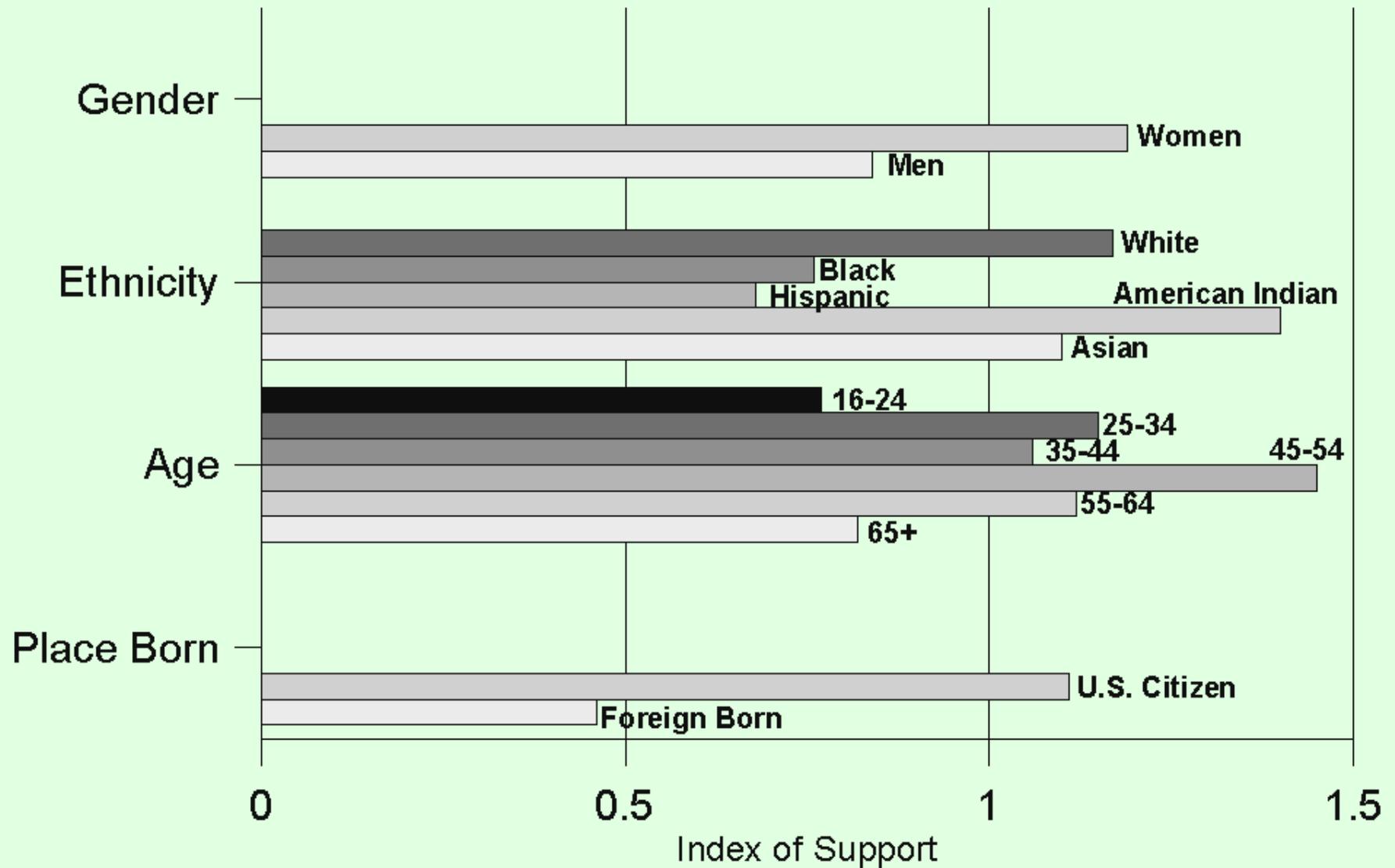
<b>North</b>	<b>66%</b>
<b>South</b>	<b>55%</b>
<b>Great Plains</b>	<b>50%</b>
<b>Rockies</b>	<b>59%</b>
<b>Pacific Coast</b>	<b>59%</b>

## ***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%

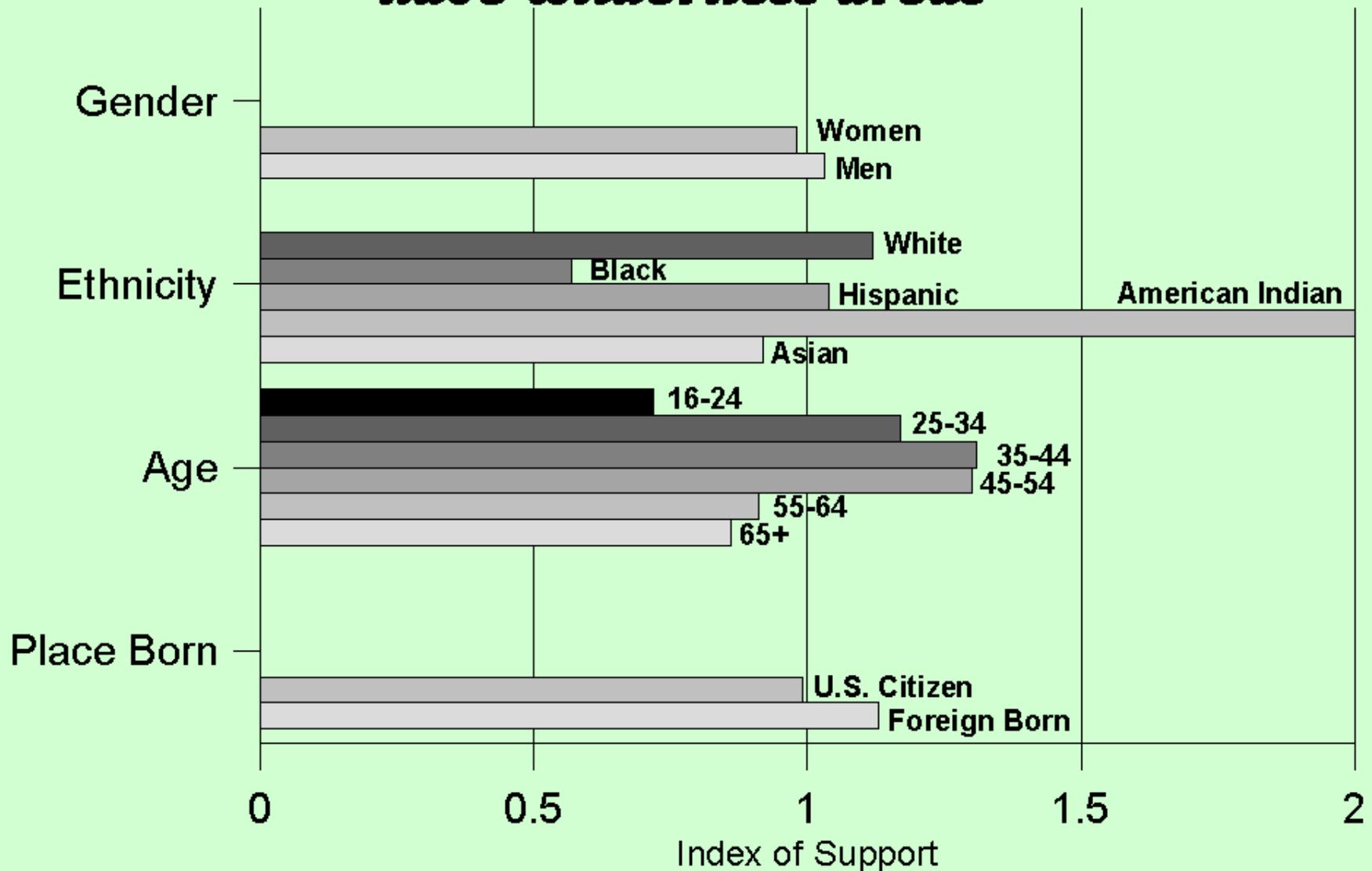
# **The Most Important Benefits of Wilderness**

## **Protecting Water Quality**



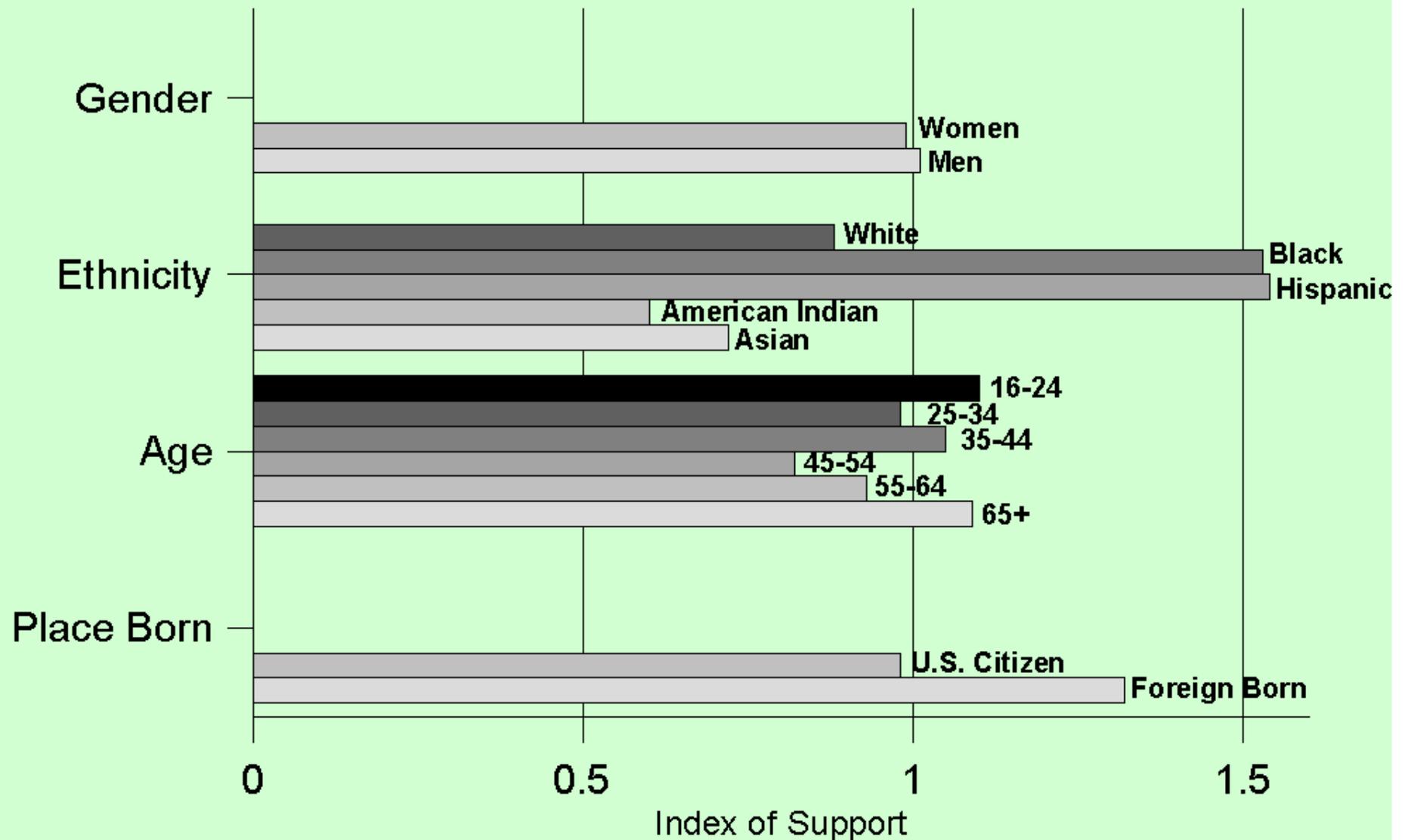
# The Most Important Benefits of Wilderness

**Knowing that future generations will have wilderness areas**



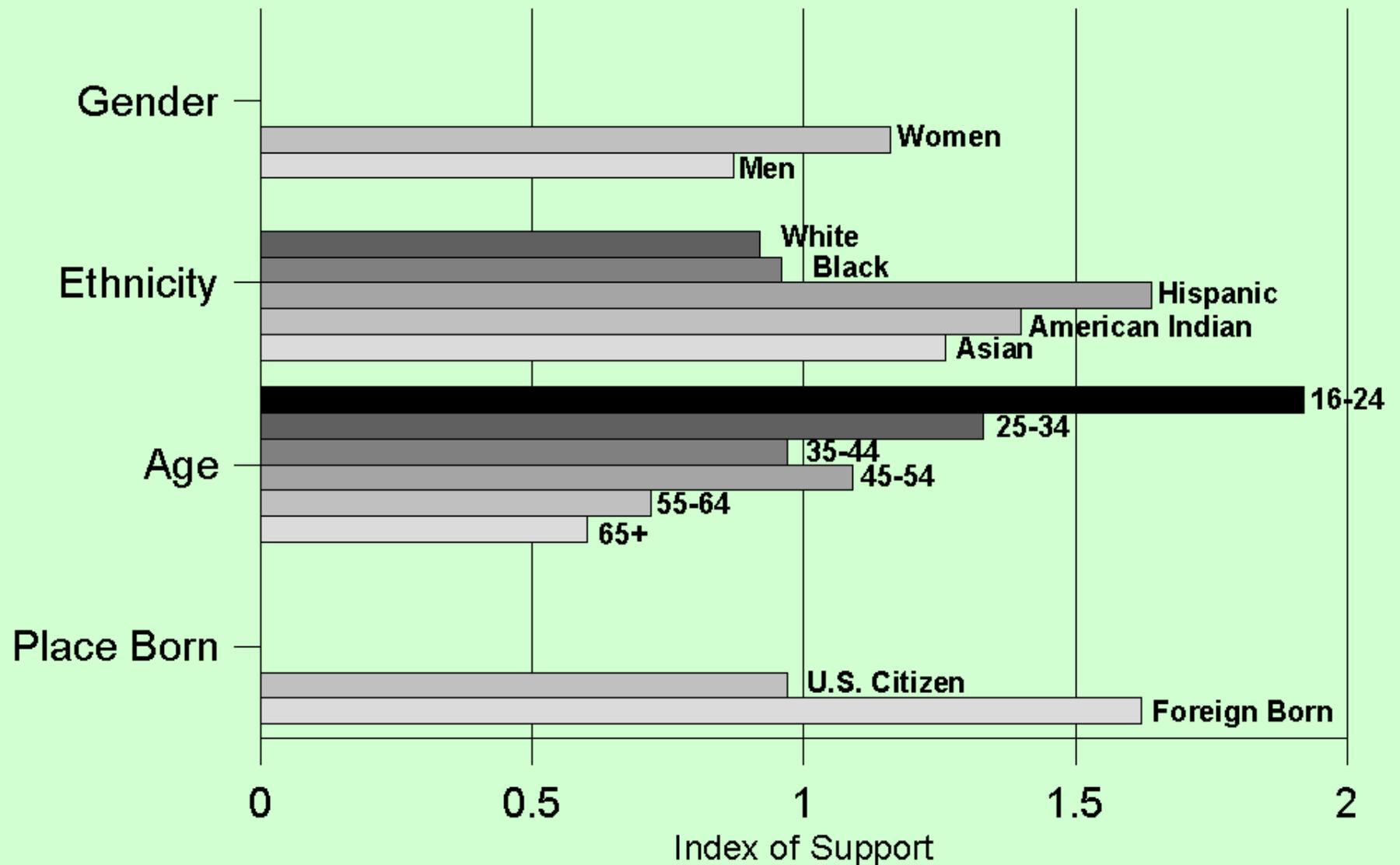
# ***The Most Important Benefits of Wilderness***

## ***Providing recreation opportunities***



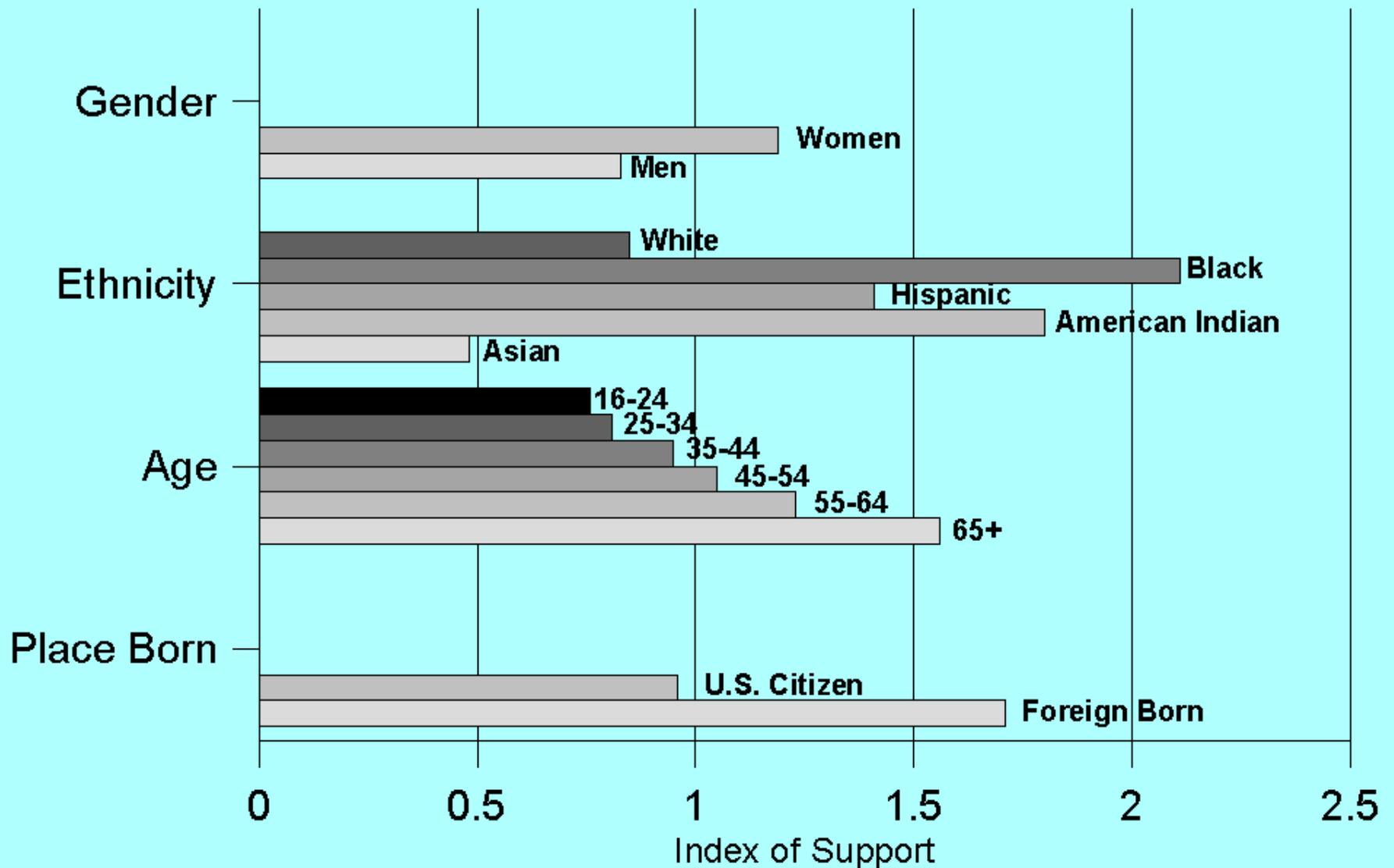
# ***The Most Important Benefits of Wilderness***

## ***Protecting wildlife habitat***



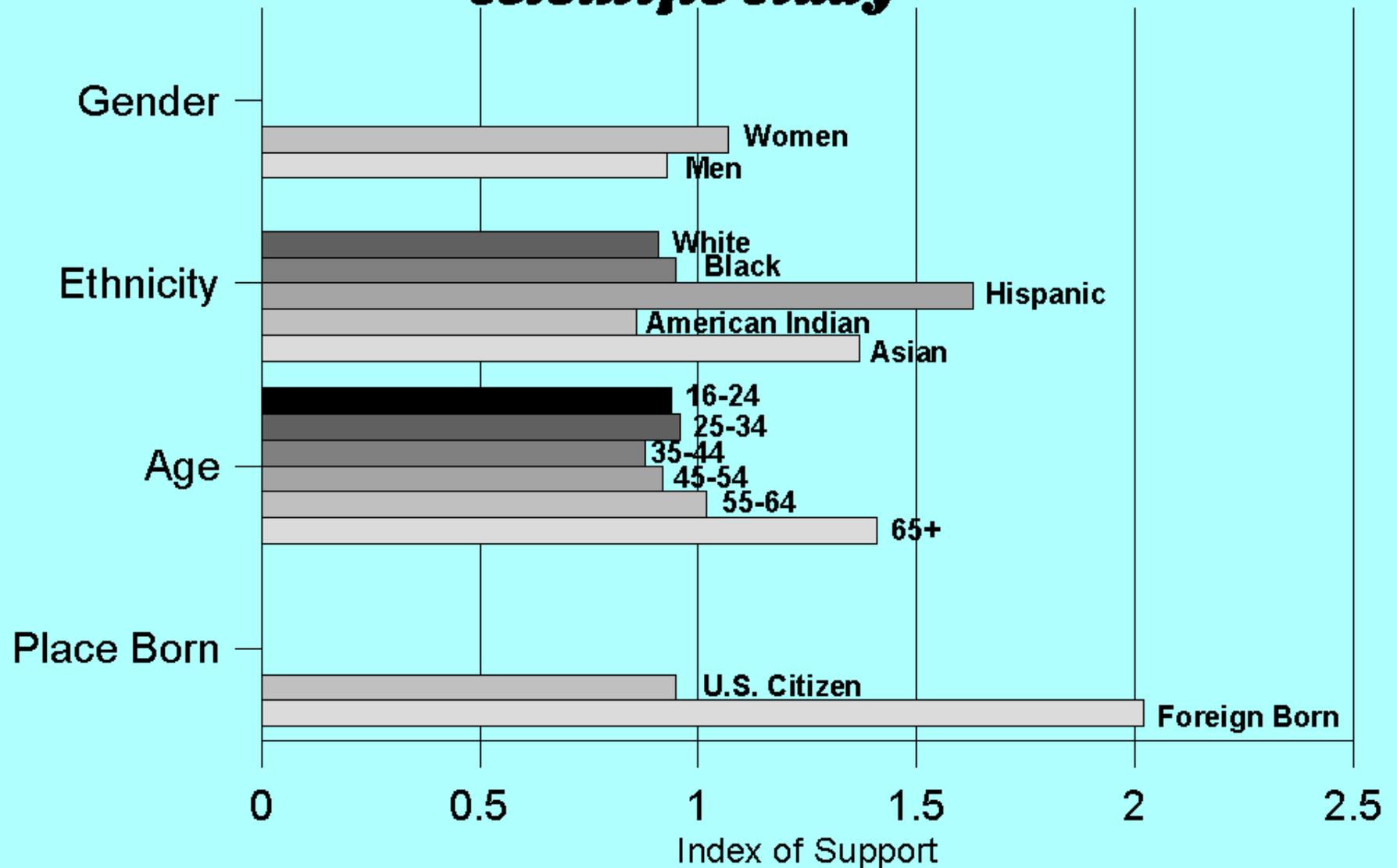
# ***The Most Important Benefits of Wilderness***

## ***Providing spiritual inspiration***



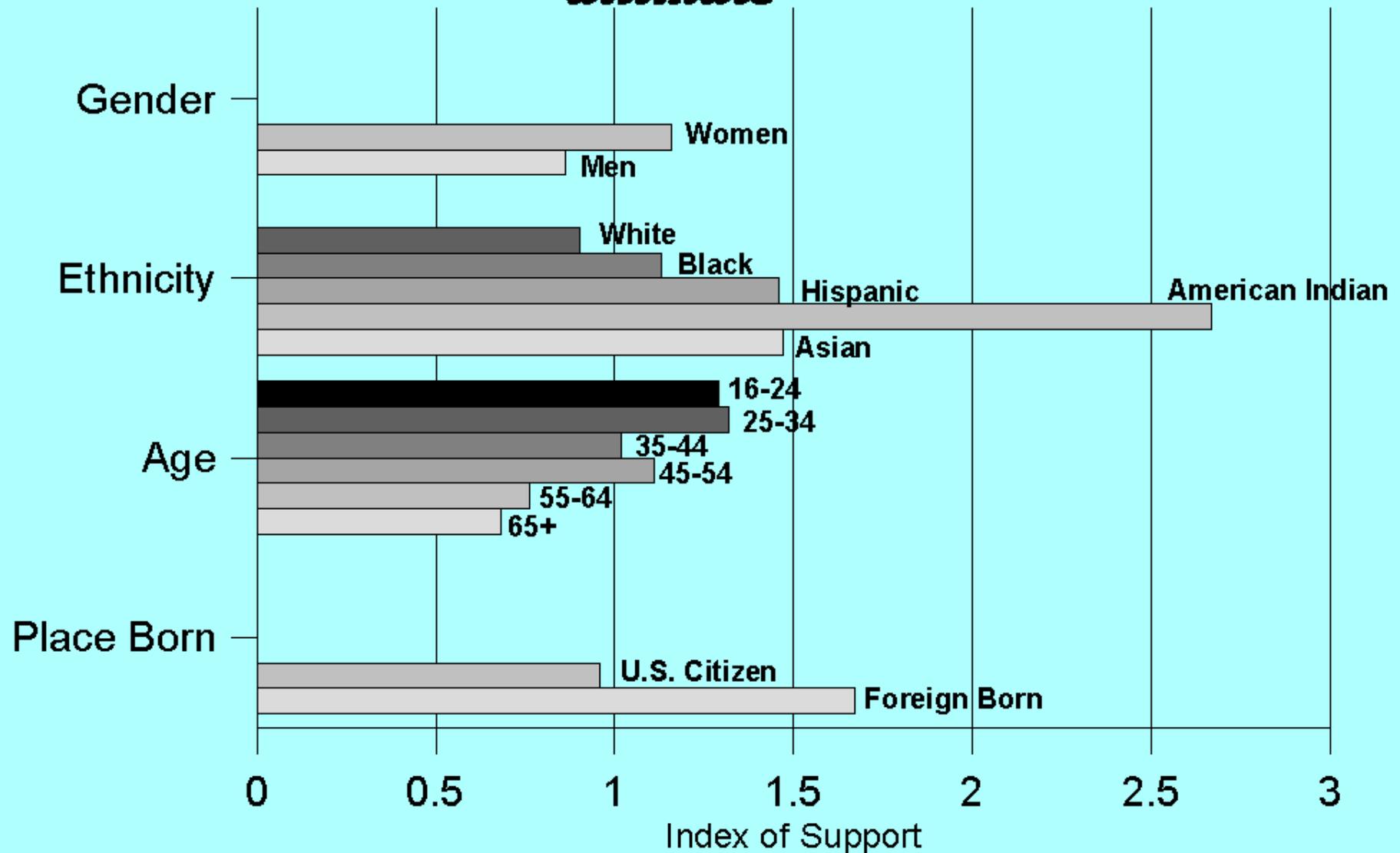
# The Most Important Benefits of Wilderness

## Preserving natural areas for scientific study



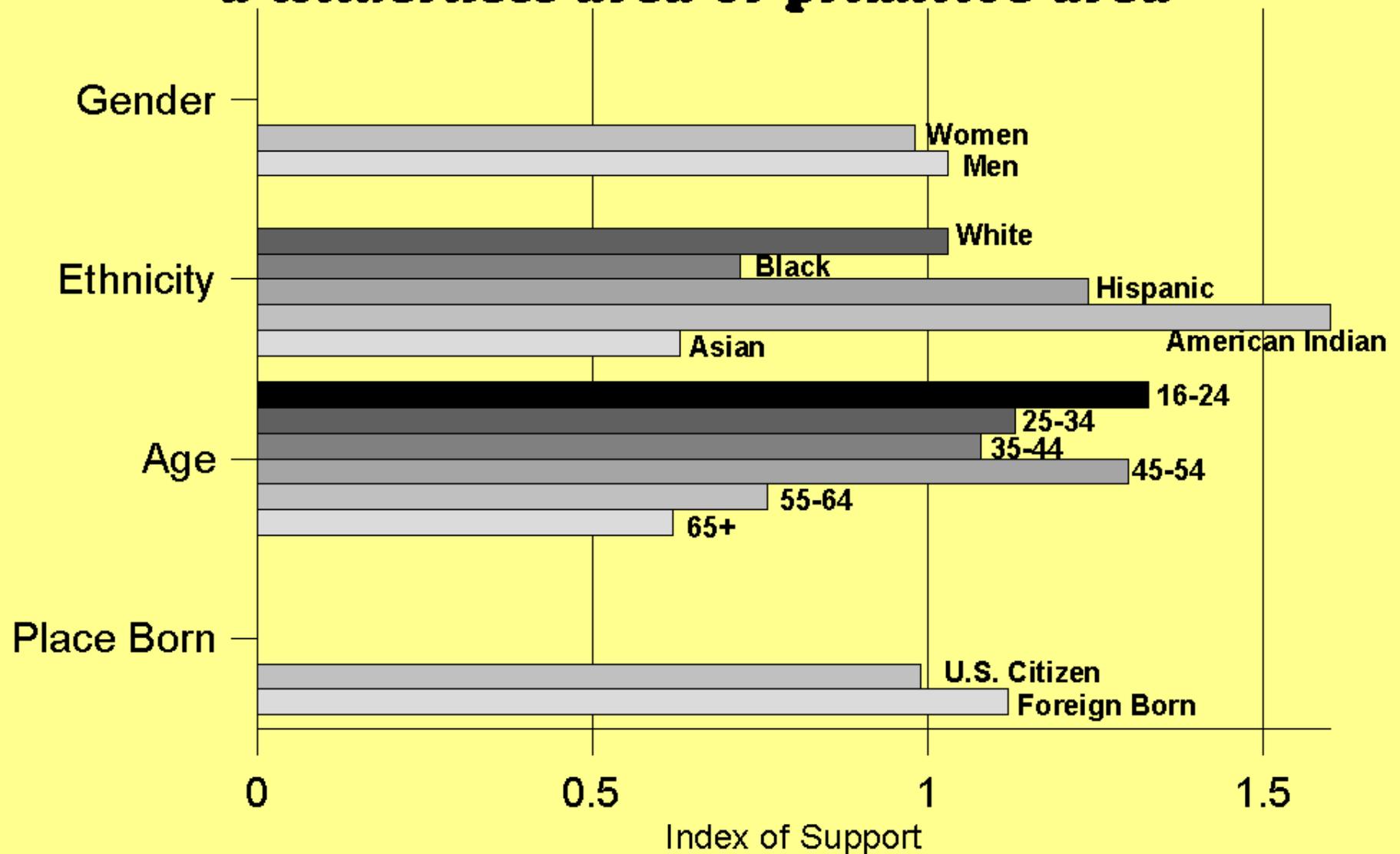
# ***The Most Important Benefits of Wilderness***

## ***Preserving unique wild plants and animals***



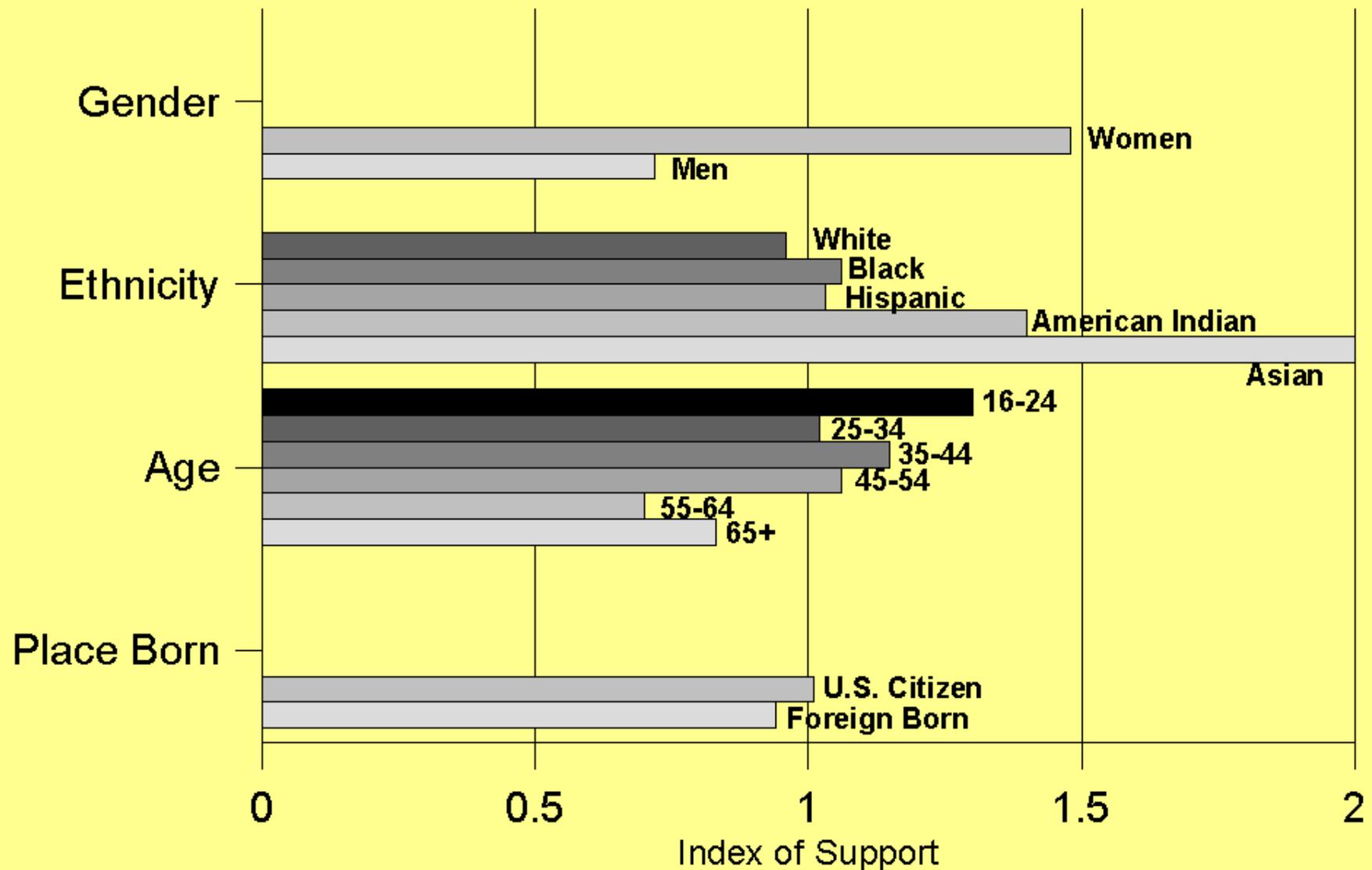
# The Most Important Benefits of Wilderness

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



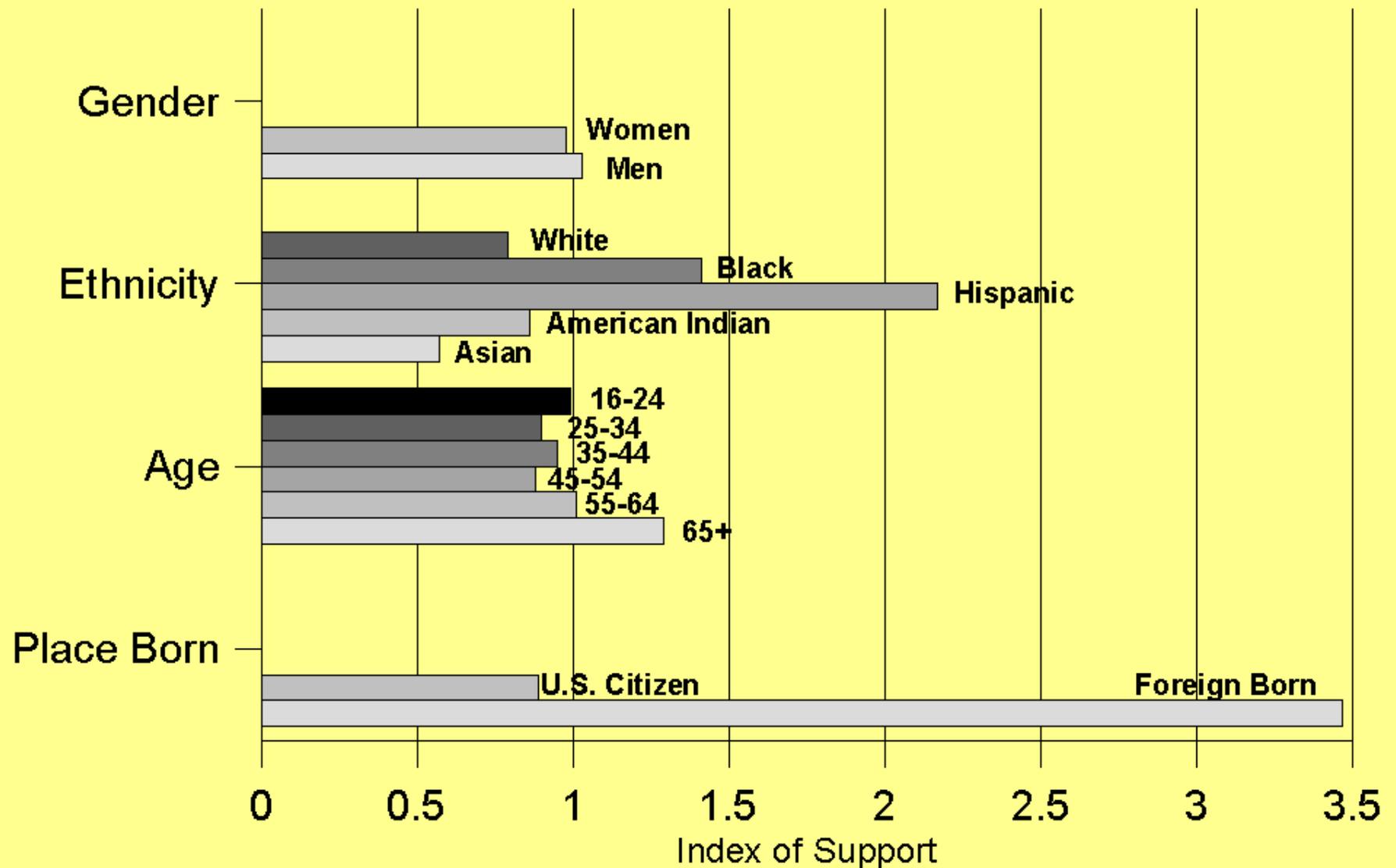
# The Most Important Benefits of Wilderness

## Protecting air quality



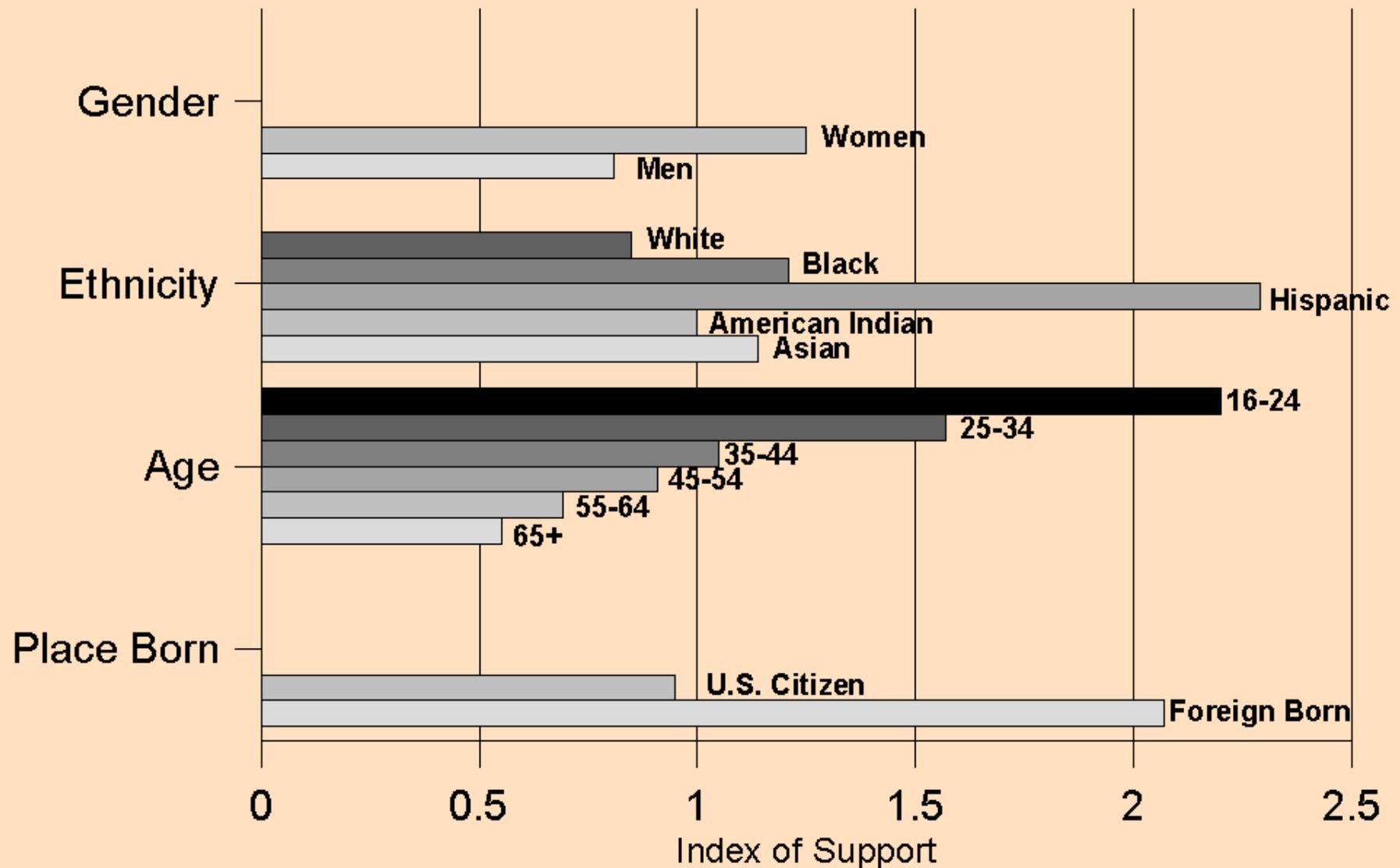
# ***The Most Important Benefits of Wilderness***

## ***Providing income for the tourist industry***



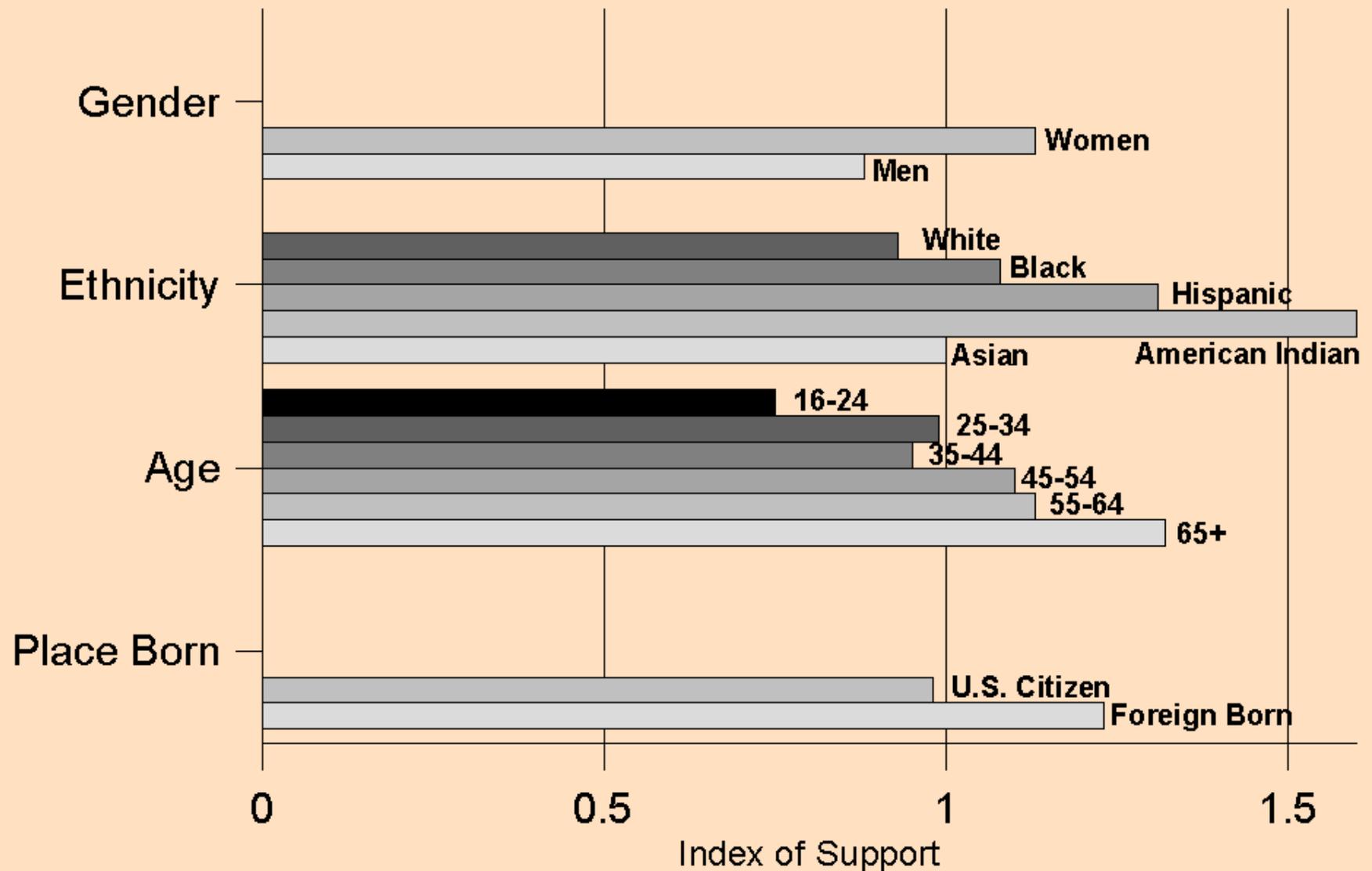
# ***The Most Important Benefits of Wilderness***

## ***Protecting rare and endangered species***



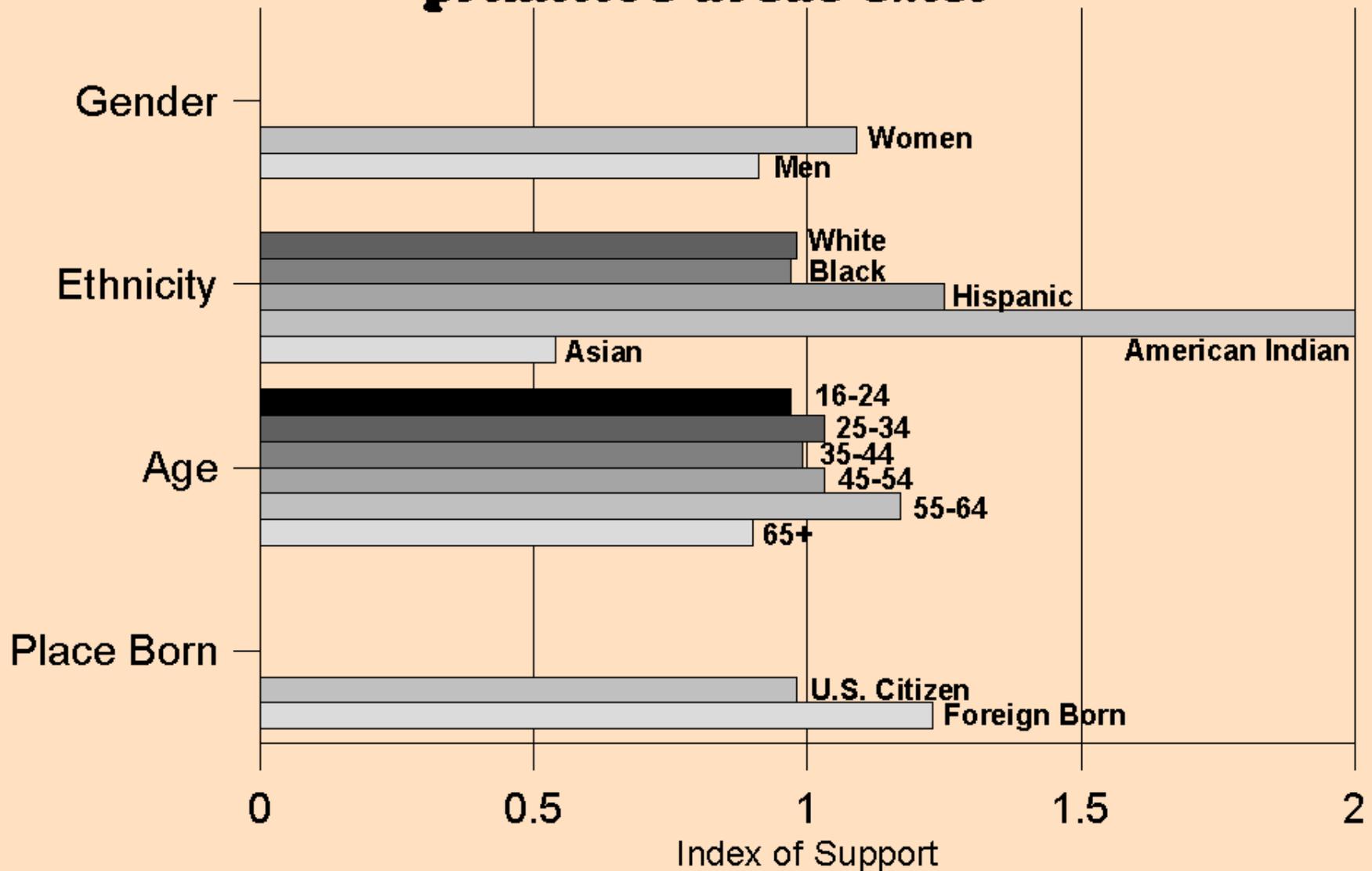
# ***The Most Important Benefits of Wilderness***

## ***Providing scenic beauty***



# The Most Important Benefits of Wilderness

**Just knowing that wilderness and primitive areas exist**



# Opinions/Values On National Forests

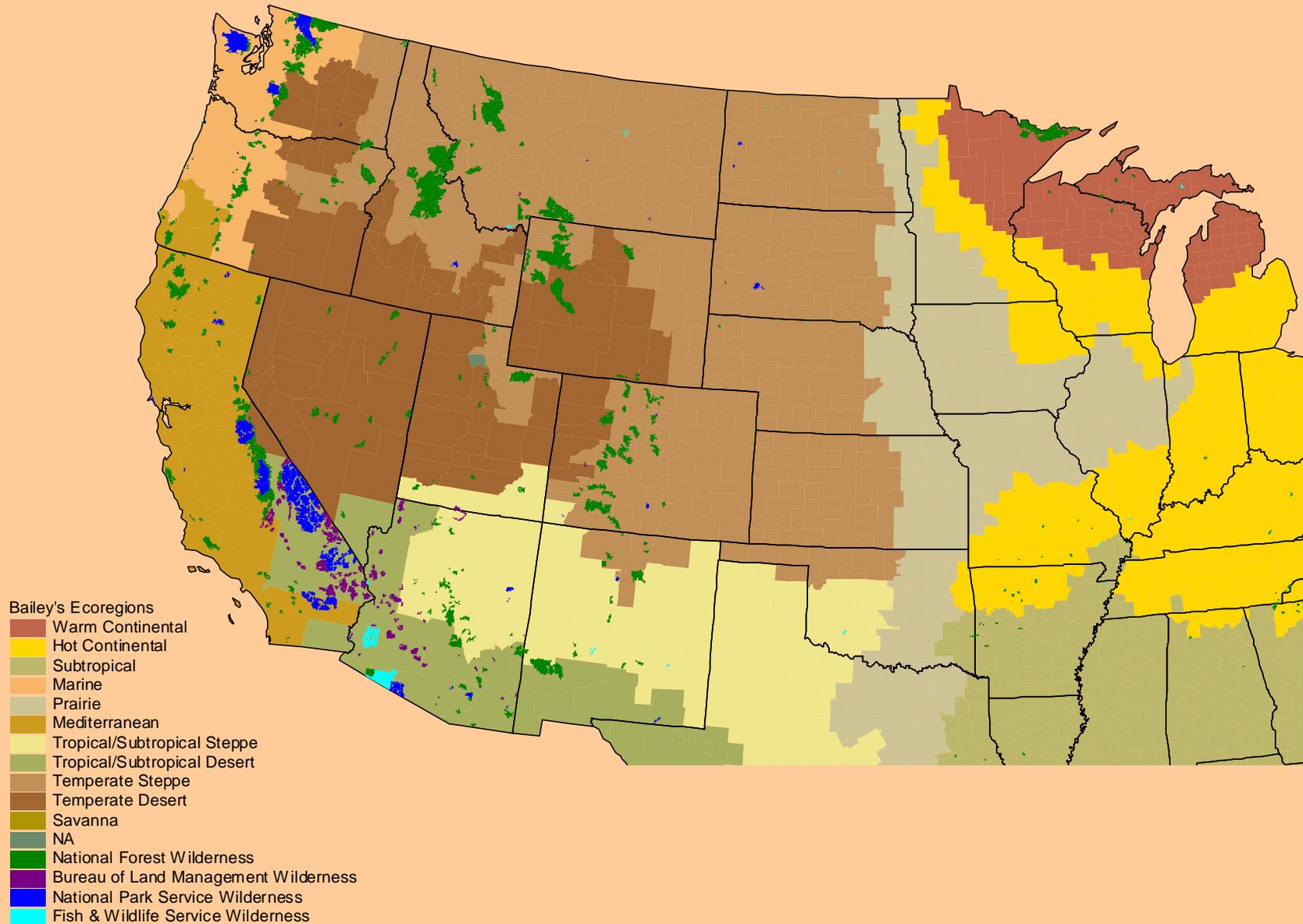
	Percent		
	Atlanta	Denver	Los Angeles
Highly Value Wilderness As Wildlife Habitat	70.0	33.1	53.4
Highly Value Wilderness as a Future Option to Visit	49.5	22.0	34.0
Develop Non-motor Trails	66.4	52.8	58.8
Visit Nature Centers	74.4	66.1	55.1
Swimming in Natural Waters	65.8	38.6	38.7
Big Game Hunting	5.8	4.3	0.7

# Demographics by Metro Area

	Percent		
	Atlanta	Denver	Los Angeles
White	63.4	61.9	33.8
Black	28.5	4.4	7.8
American Indian	0.2	0.2	0.5
Asian	3.5	2.8	8.5
Hispanic	4.4	30.8	49.5
U.S. Born	93.6	83.8	66.7
Foreign Born	6.4	16.2	33.3

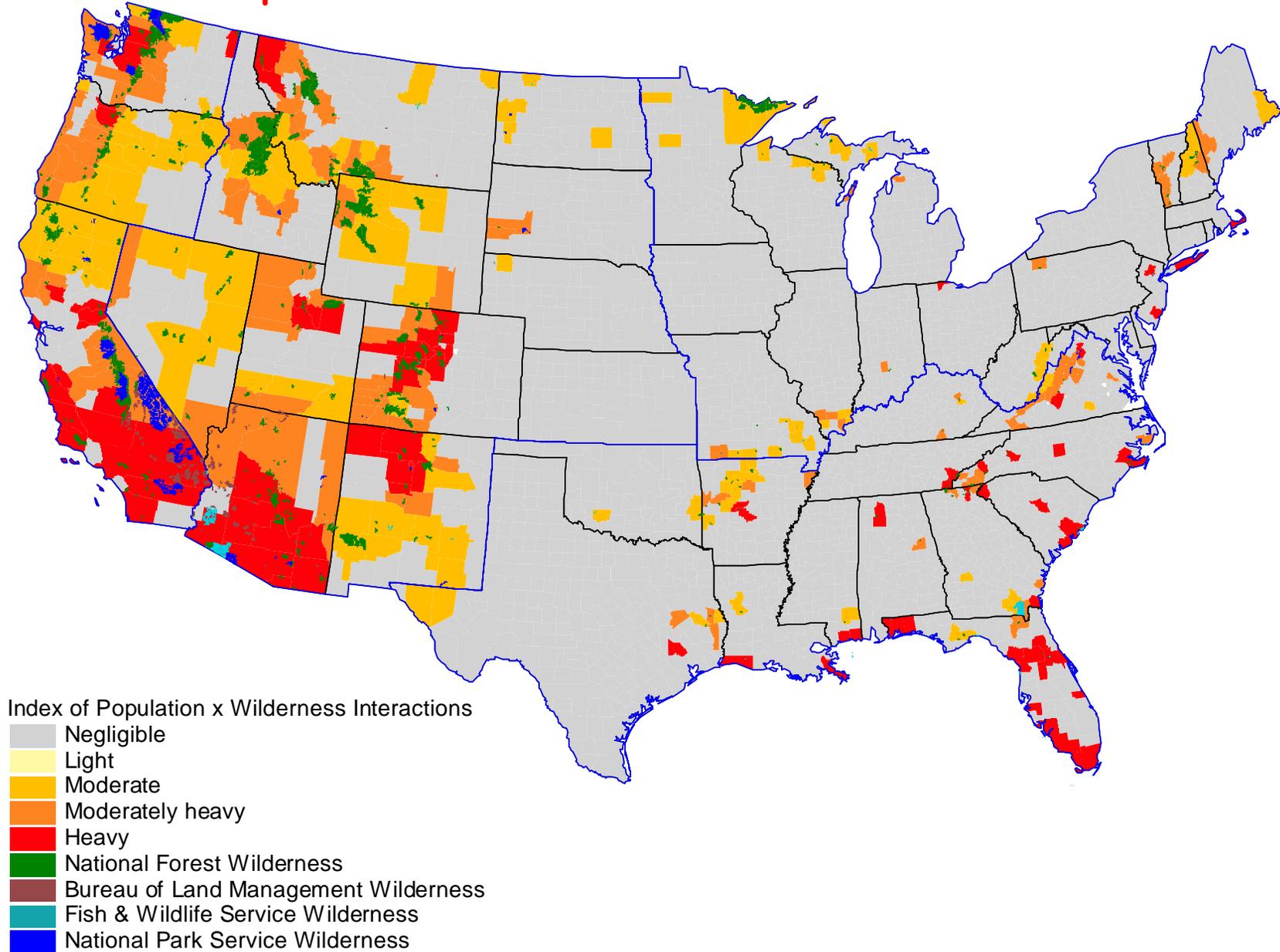
***The  
Future of  
Wilderness***

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



# Future Wilderness Hotspots (2020)

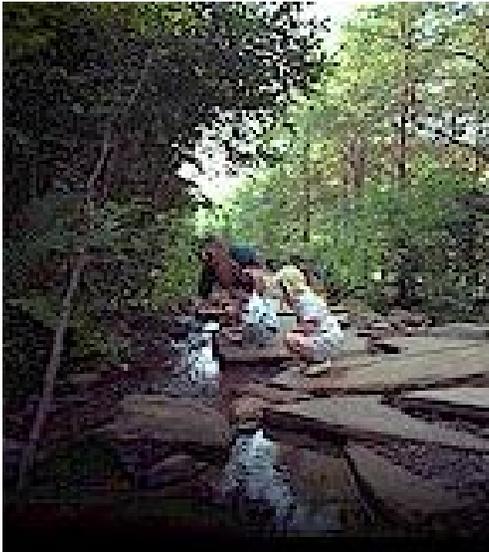
## Population Pressures on Areas with Wilderness





**Growth in Viewing/Learning Activities Clearly Indicates a Need to Expand Interpretive Services. There's So Much to Be Gained Here.**

# **Viewing/ Learning Activities**



Trends Birdwatching (No. 1) +236%  
Sightseeing +40%

## Participation (percentages)

Visit Nature Centers	59
View/Photo Scenery	55
Sightseeing	54
View/Photo Wildlife	41
View/Photo Flowers	41
View/Photo Birds	30
View/Photo Fish	22



**Demands for Pedestrian Trail  
Uses Are Growing Much Faster  
Than Horseback Uses, We need to  
Assure Pedestrian Access.**

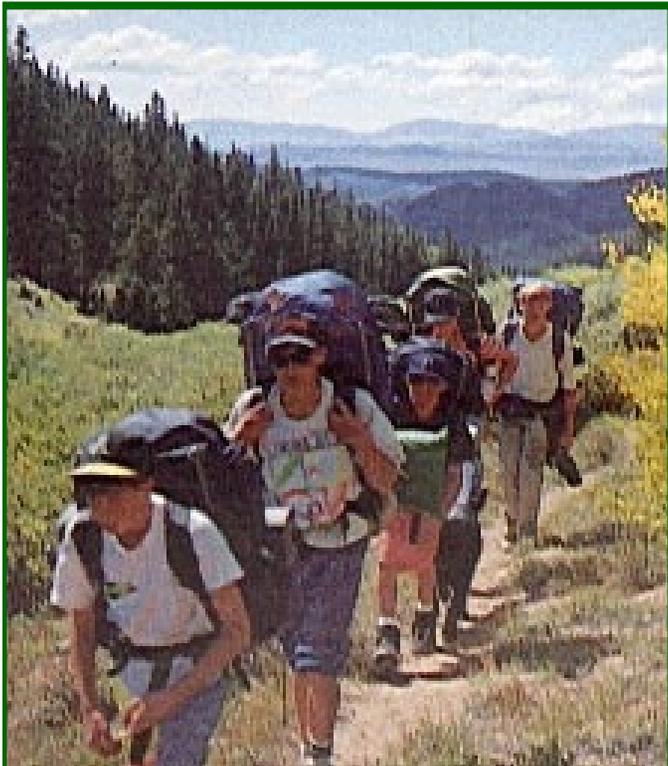
# ***Pedestrian Trail Uses***

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## Trends

Hiking and Backpacking No. 2 and 3 in growth rate  
(+196% & +166% since 1982)

Participation: Hiking 33.4%, Backpacking 10.8



## Profile (percentage)

	<u>Hiking</u>	<u>Backpacking</u>
Female	46.1	37.6
Under 35 years	41.6	55.1
55 or older	17.8	7.8
Foreign born	15.0	8.3
Urban	81.1	81.3

# A VISION OF THE FUTURE

- **Protect streams and other sources of clean water (95%)**
- **Maintain NFs for future generations (94%)**
- **Protect Habitat for wildlife and fish (90%)**
- **Manage to leave forests natural in appearance (88%)**
- **Protect rare and endangered species (86%)**
- **Provide information and education about forests (81%)**
- **Plant and manage for an abundant timber supply (79%)**
- **Provide quiet, natural places for personal renewal (77%)**
- **Provide access, services and information for recreation (71%)**
- **Provide roads, accommodations and services to support local tourism businesses (51%)**
- **Provide permits for grazing livestock (46%)**
- **Produce raw materials to support local industries (39%)**



**(In parentheses are percentages agreeing to strongly agreeing)**

**THE ANSWER IS,  
WILDERNESS IS, STILL,  
VERY APPROPRIATE AND  
WANTED BY TODAY'S  
U. S. SOCIETY?**



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