

# Rocky Mountain Research Station Science You Can Use Bulletin



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## Recreating in Color: Promoting Ethnic Diversity in Public Lands

### AN UNUSUAL BOOK

Eleven years ago an unusual book was published. This book profiled 20 individuals and how they interact with nature in their lives and careers. Their careers included rangers to firefighters to conservationists. What made this book unusual was this: All 20 of the people profiled were of African-American descent. The book, created by a wildlife photographer named Dudley Edmondson, was

entitled *The Black and Brown Faces in America's Wild Places*.

Why did anyone think that such a book was necessary? What was the point of its creation?

Unfortunately, for many American people of color, the answer is as obvious as it is unclear to many Americans of European descent: Racial and ethnic minorities in the United States are not as likely to

recreate or work in the country's natural lands as are people who are part of the country's racial white population.

Nina Roberts, a San Francisco State University professor and one of the 20 individuals profiled in the book, explains that much can be done to improve accessibility of public lands. She says, "U.S. agencies have been researching racial diversity in



### SUMMARY

Recent studies of the Forest Service's National Visitor Use Monitoring data show a wide disparity in racial and ethnic use of national forests. For example (assuming a direct connection between the number of people who filled out forms and overall national forest visitation numbers), Blacks or African Americans, who make up about 13 percent of the U.S. population, accounted for about 1 percent of national forest visits in 2010. Hispanics or Latinos, who make up about 17 percent of the U.S. population, accounted for less than 7 percent.

Researchers at the Rocky Mountain Research Station in Fort Collins, Colorado, are studying these numbers systematically—the first time a nationwide study has been done with these data. They hope that their research will help National Forest System staff to encourage different racial and ethnic groups to connect with public natural lands. By doing so, national forest managers will be transforming management practices and priorities to encourage wider use of natural lands by different racial and ethnic groups.

A self-described "big game hunter and Black cowboy" in Minnesota is one of 20 individuals profiled in Dudley Edmondson's book about African Americans in the U.S. outdoors (Photo by Dudley Edmondson).



National Parks since 1962. There’s this huge body of research about ethnic barriers to use of public lands. If you do a little digging it’s easy to find old photographs of signs that say ‘whites only’ or ‘negroes only’ in places like Shenandoah National Park. Fast forward to today, those signs are gone but the usage patterns are still there.”

### CHECKING THE NUMBERS

Consider the following figures from the 2010 U.S. Census and the U.S. Forest Service National Visitor Use Monitoring (NVUM) program as they relate to recreation on public lands. Assuming a direct connection between the number of people who filled out forms and overall national forest visitation numbers:

- Blacks or African Americans, who make up about 13 percent of the

U.S. population, accounted for about 1 percent of national forest visits.

- Hispanics or Latinos, who make up about 17 percent of the U.S. population, accounted for less than 6 percent of national forest visits.
- Non-Hispanic whites, who make up about 63 percent of the U.S. population, accounted for well over 90 percent of national forest visits.

While Asian, Native American and Pacific Islander visitation numbers were also estimated, the Black/African American and Hispanic/Latino ethnic groups stood out as being especially underrepresented in visits to national forests.

### RECONNECTING MINORITIES TO NATURAL LANDS

To better understand the relatively low use of U.S. public lands

by minority groups, a team of scientists and experts is collecting and analyzing NVUM data. David Flores, a social scientist with the U.S. Forest Service Rocky Mountain Research Station in Fort Collins, Colorado, collaborates with Roberts and is the lead author on a paper just published in the *Journal of Forestry* entitled: “Recreation equity: Does the Forest Service serve its diverse publics?” According to Flores, “There are a whole range of reasons for disproportionate ethnic use of natural lands, and it can get pretty complicated. Unfamiliarity with natural lands and distance both play a role, but there are cultural reasons that can be addressed. For example, I grew up in a predominantly Mexican neighborhood. To me, the mountains were places where wealthy whites lived and where we were not welcome, so I had no interest in exploring the outdoors, nor in hiking or camping or anything like that. It took some time and effort for me to understand and appreciate nature.”

In Flores’ words, he and his team are asking the questions, “Is the Forest Service doing what it needs to do to make sure that minorities have access to connecting with natural lands? Or is it that minorities simply don’t want to recreate in those places?”

Flores goes on to say, “Personally, I think it’s both, and that there’s a lack of understanding on both sides. But as minorities become a larger



Past segregation in places such as Virginia’s Shenandoah National Park may have created lasting ethnic aversion to use of Federally managed natural areas (Photo: National Park Service).



## National Visitor Use Monitoring: Helping to Understand Who's Visiting

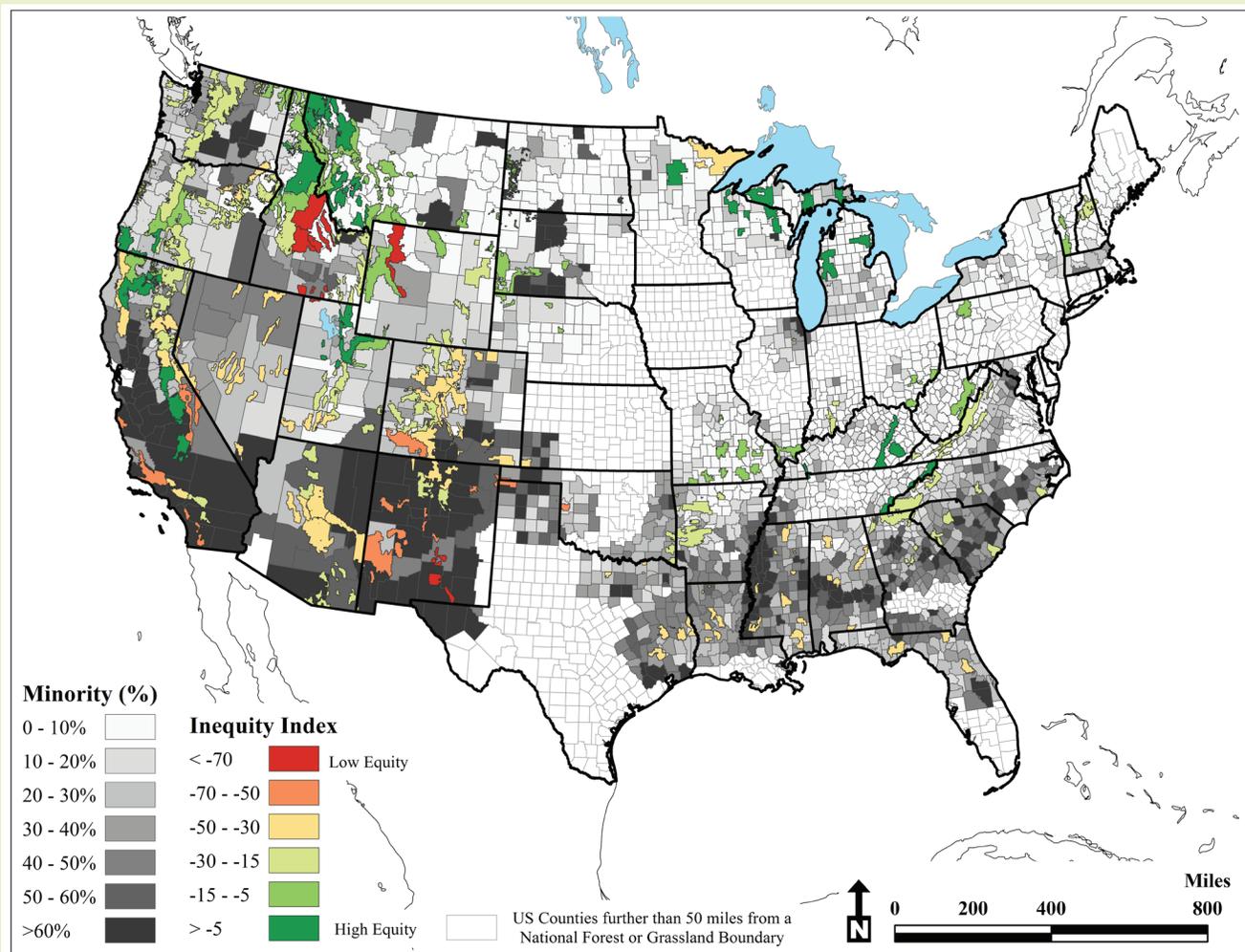
Visitation data for National Forest System lands comes from a program called the National Visitor Use Monitoring program, or NVUM for short. Through this program, which is pronounced “en-vumm,” more than 100,000 national forest and grasslands visitors are surveyed every 5 years, with one-fifth of all national forests and grasslands conducting surveys each year. These surveys, which typically take 10 or 15 minutes, are confidential and entirely voluntary.

NVUM program manager Don English describes NVUM this way: “The intent of the program is to estimate the volume of visitation that occurs on national forests and grasslands and to provide descriptive information about those visitors. That information can include visitation estimates, who these visitors are demographically, why they come to national forests, how satisfied they are with the facilities and services provided, and how much money they spend on their visit.”

Now in its third 5-year data collection cycle, NVUM helps Forest Service managers identify what visitors want. Through NVUM results, managers can better understand recreation use patterns and uses of facilities, which helps them plan workforce and facility needs. It also helps define visitor travel distances and the market area—a key piece of information for understanding the economic benefit of a national forest or grassland.

“For some national forests,” English explains, “the market area is just a couple of counties. But for other national forests—say, in the Front Range of the Rockies—50 percent of the market could come from all over the country. This information is used in budget formulas and allows national forest managers to develop estimates on how much forest recreation contributes to local economies.”

Additional information on NVUM can be found at [www.fs.fed.us/recreation/programs/nvum](http://www.fs.fed.us/recreation/programs/nvum).



Researchers were able to compare minority percentages on a local level with national forest utilization to quantify utilization imbalances (Source: U.S. Forest Service).



percentage of the population, it becomes more important to draw them into the conversation about how these lands are managed. I believe that it's essential for minority groups to know that they are welcome in public natural lands."

### THE HEART OF THE COMMUNITY

Through their statistical analysis and the creation of an "inequity index," these researchers hope to better connect minority groups with our nation's natural lands. The inequity index is a ratio between the percentage of racial and ethnic minority population within 50 miles of a national forest boundary compared with the percentage of national forest visitors belonging to a racial or ethnic minority. The Forest Service's Southwestern Region recently adopted the index as a recreation performance measure in their 2014 Sustainable Recreation Strategy. "We're not out to get visitor usage to match national ethnic percentages," Flores says, "but we do think that there are large groups of the population that could be better connected to natural lands."

*"As minorities become a larger percentage of the population, it becomes more important to draw them into the conversation about how these lands are managed."*

Francisco Valenzuela, a recreation planner for the Forest Service's Southwestern Region and another researcher on the team, explains it this way: "In communities where there's a nearby national forest, we want that Forest to be at the heart of the community. We want everyone in that community to feel at home in the national forest and we want to increase national forests' capability of providing services. This research will help us measure our progress."

Valenzuela hopes that the research will help national forest managers culturally transform workplace practices and priorities to better reflect the current and future U.S. population. And although many natural land management

agencies face significant deferred maintenance costs, personnel shortages and other financial constraints, Valenzuela notes that there are many ways to improve community focus. He explains, "We can accomplish our goals by engaging directly with the community—for example, through working with groups like volunteer agencies, youth organizations and Native American tribes."

Increased engagement and more balanced ethnic use may also help preserve natural lands for future generations. As Valenzuela explains, "We're on track to become a minority-majority country, with more than half of the population made up of minorities. These people are going to be voting on

## U.S. FOREST SERVICE HISPANIC ACCESS RESOURCE ASSISTANT FELLOWSHIP



WHAT'S YOUR NEXT BIG ADVENTURE?

WHAT'S YOUR NEXT BIG STEP FOR PROFESSIONAL GROWTH?

Recent efforts have been made to attract minorities to careers in Federal land management (Source: U.S. Forest Service).



*“We want everyone to feel at home in the national forest and we want to increase national forests’ capability of providing services. This research will help us measure our progress.”*

issues that will determine how natural lands are managed, so it’s important that these people understand and appreciate natural areas. If we fail to serve minorities, we could lose support for our natural areas.”

### CELEBRATING RACIAL AND ETHNIC MINORITY CULTURE IN NATURE

From a Latino perspective, Flores says, “A lot of Latinos still feel like they’re visitors to this country, and unfortunately it can be easy to get that sense while visiting natural areas: There can be a sense that there’s a lack of facilities that can be used as part of a communal, shared experience. Latinos like to recreate as large family groups; natural lands don’t always have areas where that’s easily accomplished.” Flores cites a nonprofit organization called Latino Outdoors as one that strives to better connect Latinos and others to the outdoors. Latino Outdoors is a volunteer-run organization that focuses on celebrating Latino culture in nature and connecting families with the outdoors.

### MANAGEMENT IMPLICATIONS

- Data from the Forest Service’s National Visitor Use Monitoring program indicate disproportionate utilization of National Forest System recreation opportunities by the nation’s main racial and ethnic minority groups.
- Past individual case studies conducted by the Forest Service, although regionally focused, have addressed constraints to outdoor recreation for racial and ethnic minority groups and offer valuable insight into racial minority perceptions, beliefs, attitudes, and access to outdoor recreation.
- Continued monitoring of racial and ethnic diversity trends in public land use, including the recently developed inequity Index, can help land managers and policy-makers determine how and where to target limited resources to further emphasize inclusive visitation in decision making and planning processes.

According to Latino Outdoors founder José González, Latino Outdoors was originally created as a way for Latino professionals to connect and support each other. A native of rural Mexico, González explains, “I know so many people who don’t engage with nature because it’s not a focus in our culture. A few years ago I searched online for ‘Latino outdoors’ to see if there was any kind of online hub. I didn’t find anything — there was no hub or connecting point. So I went ahead and started one.”

Latino Outdoors partners with the U.S. Forest Service and other State and Federal land management agencies as well as local nonprofit organizations to provide funding for volunteer

programs. This funding is mainly in the form of financial support for outdoor experience leaders in Latino Outdoors hubs such as San Francisco, Sacramento, Los Angeles, Seattle, Portland, Denver, Tucson, San Antonio, New York City, and Washington, DC. Through these leaders, Latino Outdoors provides more than 70 outdoor experiences every year, along with social networking and storytelling opportunities to build a Latino-centered message of environmental awareness and belonging.

While the organization focuses on Latinos, González says, people of all ethnic backgrounds are welcome. He explains, “We welcome everybody—it’s an inclusive starting point. When others join



*Latino Outdoors sponsors guided hikes and outdoor excursions for to help connect ethnic groups with the outdoors. (Photo courtesy of Latino Outdoors).*



us, we have the opportunity to connect with others and to share the experience.”

González explains that Latino Outdoors also provides opportunities for much-needed professional networking between conservation professionals of all cultural backgrounds. He explains, “We just had a two-day leadership campout in Redwood Regional Park east of Oakland, California. We had people there from Asian, Native American and other groups. What was really amazing about it was the sense of unity and connection where people can express themselves.”

## HOPE FOR AN “EQUALIZING EXPERIENCE”

Looking forward, Flores is hopeful that natural areas can be utilized in a way that brings people of different cultures together. He says, “Disconnection is unfortunately very common in an urban setting, while being outdoors can be an equalizing experience. I think the Forest Service has the opportunity to provide that kind of experience. In urban areas, you have barriers like bridges and highways that can keep groups apart. My hope is that, once minorities get out in nature, they’ll encounter a place where barriers between groups don’t exist.”

## FURTHER READING

Flores, David; Kuhn, Karmon. 2017. Latino outdoors: Using storytelling and social media to increase diversity on public lands. In: National outdoor recreation conference: Creating a relevant and inclusive future; 2017 May 1–4; Scottsdale, AZ. Mount Shasta, CA: Society of Outdoor Recreation Professionals; Washington, DC: U.S. Department of the Interior, National Park Service. [https://recpro.memberclicks.net/assets/Conference\\_Proceedings/2017/flores\\_2017norc2.pdf](https://recpro.memberclicks.net/assets/Conference_Proceedings/2017/flores_2017norc2.pdf)

Flores, David; Falco, Gennaro; Roberts, Nina S.; Valenzuela, Francisco P., III. 2018. Recreation equity: Is the Forest Service serving its diverse publics? *Journal of Forestry*. doi: 10.1093/jofore/fvx016. <https://www.fs.usda.gov/treearch/pubs/56144>

Roberts, N.S. 2015. Effectively connecting with communities across cultures: There’s no app for that! *Journal of Interpretation Research*, 20(1): 7–10. [www.interpnet.com/NAI/docs/Publications/JIR-v20n1.pdf](http://www.interpnet.com/NAI/docs/Publications/JIR-v20n1.pdf)

Roberts, N.S.; Lara, B.M.; Chavez, D.; Sheffield, E.A. 2009. Serving culturally diverse visitors to forests in California: A resource guide. Gen. Tech. Rep. PSW-GTR-222. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 76 p. [https://www.fs.fed.us/psw/publications/documents/psw\\_gtr222/psw\\_gtr222.pdf](https://www.fs.fed.us/psw/publications/documents/psw_gtr222/psw_gtr222.pdf)

Roberts, N.S.; Pozzoboni, K.; Reist, N.; Sikand, T. 2015. Outside your door: Young producers bridge the divide between urban youth and public lands. San Francisco State University. [https://theieca.org/sites/default/files/conference-presentations/coce\\_2015\\_boulder/reist\\_nancy\\_pozzoboni\\_kristen\\_roberts\\_nina\\_sikand\\_tanvi-155732602.pdf](https://theieca.org/sites/default/files/conference-presentations/coce_2015_boulder/reist_nancy_pozzoboni_kristen_roberts_nina_sikand_tanvi-155732602.pdf)

Furr, Chris W.; Hall, Josh; Jackson, Pat. [et al.]. 2014. Southwestern Region sustainable recreation strategy. Albuquerque, NM: U.S. Department of Agriculture, Forest Service, Southwestern Region. 12 p. [www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/fseprd495959.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd495959.pdf)

## Connecting With Minorities on the Land

Natural land staff can connect with minority groups by trying a host of possible management changes, including:

- The use of international symbols on signage;
- Providing Spanish-language informational materials;
- Reconsidering use of the ranger uniform to acknowledge cultural aversion to law enforcement;
- Cultivating nongovernmental organization partners to provide van or minibus service from nearby communities;
- Developing relationships with local ethnic leadership and community centers;
- Advertising natural land recreation opportunities on television (especially Spanish-language stations);
- Cooperating with inner-city youth wilderness programs such as the 21st Century Conservation Service Corps;
- Emphasizing public ownership of public lands through social media and local or national campaigns similar to the forest service’s It’s All Yours campaign that was developed for the FIS Alpine World Ski Championships 2015;
- Maintaining partnerships with nonprofit organizations such as the Hoods to Woods Foundation and Latino Outdoors;
- Supporting minority-focused stewardship programs such as the central California consortium;
- Providing outdoor areas with amenities such as group recreation areas, picnic tables, grills, trash cans and flush toilets; and
- Hiring multilingual and ethnic-minority rangers and staff.

## KEY FINDINGS

- Recent research indicates disproportionate utilization of U.S. national forest recreation opportunities by several racial and ethnic minority groups.
- From the perspective of public land management in the United States, these findings demonstrate the need for the Forest Service and other public land agencies to scrutinize and evaluate strategies that would enhance greater racial and ethnic inclusion in outdoor recreation.
- The inequity index was recently adopted by the Southwestern Region of the Forest Service as a recreation performance measure through their 2014 Sustainable Recreation Strategy.

*“My hope is that, once minorities get out in nature, they’ll encounter a place where barriers between groups don’t exist.”*

## SCIENTIST PROFILES

The following scientists were instrumental in the creation of this Bulletin:



**DAVID FLORES** is a research social scientist with the Rocky Mountain Research Station. His research focuses on issues such as the human dimensions of climate change, organizational culture, and outdoor recreation. David entered the Forest Service in 2012 via the Presidential Management Fellowship program and became a permanent research scientist in 2014. He received an associate degree in general education from Southwestern Community College, a bachelor’s degree in sociology from the University of California Berkeley and a master’s degree and Ph.D. in sociology from the University of Michigan. Learn more about David’s work at RMRS at: <https://www.fs.fed.us/rmrs/people/davidflores>.



**FRANCISCO VALENZUELA** is the director of recreation tourism, heritage and wilderness resources for more than 22 million acres of national forests and grasslands and national monuments in the Forest Service’s Southwestern Region. Francisco has also worked for Colorado State Parks as a ranger and for Vancouver County in Washington State as a county open space and recreation planner. He is based in Albuquerque, New Mexico, and has worked with the Forest Service for more than 35 years. He received a bachelor’s degree in outdoor recreation planning and management from Colorado State University and a master’s degree in photography from Milwaukee Institute of Art and Design.



**NINA S. ROBERTS** is a professor in San Francisco State University’s Department of Recreation, Parks, and Tourism, where she is an authority on race, culture and gender issues in parks and outdoor recreation. Nina has a variety of experiences in the field including work as an education and outreach specialist with the National Park Service and as a visiting scholar at the National Parks Conservation Association. She received a bachelor’s degree in physical education and recreation from Bridgewater State University, a master’s degree in outdoor recreation and resource management from the University of Maryland College Park, and a Ph.D. in recreation resource management from Colorado State University.



**GENNARO FALCO** is a forester with the Forest Service in Taos, New Mexico. He received bachelor’s degrees in forest health and applied statistics from the State University of New York College of Environmental Sciences and Forestry and a master’s degree in forestry, silviculture and applied forest health from Northern Arizona University’s School of Forestry.

## WRITER AND PHOTOGRAPHER PROFILES



**BRIAN COOKE** is a science writer for the Rocky Mountain Research Station in Fort Collins, Colorado. In addition to his work for RMRS, Brian has completed writing assignments for the Northern Research Station, the National Park Service, various environmental services companies, and proposal writing and editing for several Bureau of Land Management projects. Brian’s science and environmental writing is frequently colored by his National Park Service interpretive training and his experience as a volunteer docent for Alcatraz Island National Historic Landmark and San Francisco Maritime National Historical Park. He received a bachelor’s degree in journalism-science writing from Lehigh University.



**DUDLEY EDMONDSON** is an established nature and wildlife photographer, author and videographer. His photography has been featured in galleries and nearly 100 publications around the world. He is the author of the landmark book, “Black & Brown Faces in America’s Wild Places,” profiling African Americans in nontraditional vocations and avocations in the outdoors. In 2008, The Wilderness Society honored Dudley with a Faces in Conservation Award for his wildlife photography. Dudley’s website can be found at [www.dudleyedmondson.com](http://www.dudleyedmondson.com).



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SCIENCE YOU CAN USE BULLETIN

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**The purpose of the Science You Can Use Bulletin:**

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