# USDA Forest Service Washington, D.C.



#### Rangeland Change: Rising to the Challenge

Associate Chief Sally Collins, USDA Forest Service 56th Annual Meeting, Society for Rangeland Management Casper, WY—February 2, 2002

It's a pleasure to be here today. I'd like to start by commending SRM for hosting this plenary session under the title: "Rangelands: Diversity Through Time." For me, looking at diversity through time includes looking at some of the changes we're seeing on the land. I wonder whether we are doing enough about it. That's what I'd like to focus on today.

Last fall, I had several opportunities to travel through parts of the Southwest. We drove through miles and miles of pinyon-juniper, and I have to say that I was shocked by what I saw. Everywhere we looked, we saw dead and dying pinyon pine. The locals had kind of a grim joke; they called it "fall color." They said they had never seen anything like it.

In addition, hundreds of thousand of acres of ponderosa pine were infested by bark beetle, with millions of dead trees in Arizona alone. And it's not just in the Southwest. All across the South, for example, we're seeing unprecedented outbreaks of southern pine beetle. In fact, we estimate that 70 million acres of forest nationwide are at severe risk of mortality from 26 different pests and diseases.

Besides pests and diseases, we're seeing catastrophic fires. Four states had record-breaking fires last year—Arizona, Colorado, New Mexico, and Oregon. California came close, and there was a huge fire in Georgia. You probably heard that the fire season was almost as severe as in 2000, which was the worst fire season we've had since 1954.

Fires, pests, disease, and drought are just symptoms of a larger crisis. The land is in trouble all across the nation, including our western rangeland. One big challenge out West is the drought. But we could be simply coming out of an exceptionally wet period. In New Mexico, for example, the past 200 years have been the wettest in a millennium, and the past 30 to 40 years the wettest of all.<sup>2</sup> So we will need our rangeland ecologists and experts in the field. Professionals like you will lead the way in finding solutions to challenges like this.

In fact, the Forest Service has identified four major challenges in the decades ahead. Declining forest health is one—I just alluded to that, with all that dead PJ. Another is wildcat use of off-highway vehicles, an enormous problem in many areas. The third is the way rural areas are being

<sup>&</sup>lt;sup>1</sup> Rocky Mountain Research Station, "Summary of Bark Beetle Activity in Ponderosa Pine Forests of Arizona" (table showing national forest and Indian reservation lands) (Flagstaff, AZ: USDA Forest Service, RMRS, Southwest Forest Science Complex, 2002).

<sup>&</sup>lt;sup>2</sup> Rocky Mountain Research Station, "Rainfall in New Mexico, 200 B.C. to 2000 A.D." (graph by Henri D. Grissino-Mayer) (Flagstaff, AZ: USDA Forest Service, RMRS, Southwest Forest Science Complex, 2002).

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broken up by development, and I'll talk about that in a moment. Right now, let me turn to the fourth major problem: invasive species.

#### **Invasive Species**

Invasive species, especially invasive weeds, pose an enormous challenge on the range. They're part of a much larger national problem with all kinds of nonnative pests and diseases as well as invasive plants and animals. Some have characterized invasives as the single greatest threat to the nation's biodiversity in the 21<sup>st</sup> century. The gypsy moth, for example, is devastating oak forests in the East, and kudzu vines have completely covered about 7 million acres in the South, smothering every other plant.<sup>3</sup> We estimate that all invasives combined cost Americans something like \$137 billion per year.<sup>4</sup>

Why are we getting so many nonnative species? It's because we live in a global economy—so the number will only grow. Nonnative weeds are a good case in point. In five western states, the number of new weeds generally fell by decade from the 1880s to the 1960s, but it has been rising ever since. Today, we estimate that invasive weeds cover about 133 million acres in all ownerships nationwide, and that they are expanding at the rate of about 1.7 million acres per year. Cheatgrass alone covers about 100 million acres of western rangeland.

Cheatgrass, leafy spurge, knapweeds, starthistles, purple loosestrife—the list goes on and on. Invasive weeds have been called an "explosion in slow motion" spreading across the landscape. As they come to dominate a site, livestock carrying capacity and wildlife habitat value *both* approach zero. We estimate the cost to Americans at about \$13 billion per year.<sup>8</sup>

How do we stop or at least slow the spread? That's where we look to you. I can tell you that you professionals enjoy the full confidence and support of agency leadership at all levels. We know that with enough resources, you can do the job.

Our job as leaders is to help you get the resources you need, and we're working on that. One way is through the National Fire Plan. Catastrophic fires pave the way for invasive weeds, so if we can stop the fires, we can slow the spread. Thanks to the National Fire Plan, we stopped 99 percent of the fires at very small sizes last year, our best record ever. The fire season was still

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<sup>&</sup>lt;sup>3</sup> University of Alabama, "The Amazing Story of Kudzu" (http://www.cptr.ua.edu/kudzu/).

<sup>&</sup>lt;sup>4</sup> USDA Forest Service, "National Invasive Species Management" (unpublished draft paper, 28 January 2003; Washington, DC: Forest Service, State and Private Forestry Staff), p. 1.

<sup>&</sup>lt;sup>5</sup> John E. Mitchell, Rangeland Resource Trends in the United States: A Technical Document Supporting the 2000 USDA Forest Service RPA Assessment (RMRS-GTR-68; Fort Collins, CO: USDA Forest Service, Rocky Mountain Research Station, 2000), p. 48.

<sup>&</sup>lt;sup>6</sup> USDA Forest Service, "Destroying the Silent Invaders: A Forest Service Strategy to Control Invasive Weeds" (unpublished draft report, 23 December 2002; Washington, DC: Forest Service, Forest Management Staff), p. 1.

<sup>7</sup> Mitchell, p. 51.

<sup>&</sup>lt;sup>8</sup> USDA Forest Service, "Destroying the Silent Invaders," p. 1.

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severe, but imagine how much worse it would have been without the National Fire Plan. The President's proposed budget for fiscal 2004 increases funding for the National Fire Plan. <sup>9</sup>

The President's budget also includes more funds for research to help control invasive species. In addition, it increases funding for environmental analysis of grazing operations. That will boost the percentage of grazing allotments in compliance with NEPA requirements.

Speaking of NEPA requirements, we're also trying to streamline our processes. We spend a lot of time and money on appeals or in court defending our decisions. To prevent appeals or litigation, we spend a lot of time and money preparing environmental studies and plans of little or no practical value. If we could devote more of those resources to improving rangeland conditions, I think we'd all be better off. We're trying to accomplish that. For example, we proposed a revised forest planning rule that we think will save 30 cents on the dollar.

#### Fragmentation

The other major problem I want to talk about is as bad for biodiversity as invasives, if not worse. In the 2000 census, the top five fastest growing states are in the sparsely populated West. People are moving in droves into our rural areas, especially out West, but also in parts of the South. They are building homes on small woodlots or buying condominiums on old farms or ranches. One of the greatest threats we face in the 21<sup>st</sup> century is the loss of open space. By one estimate, we are losing about 4,000 acres of open space every day.

That includes a lot of rangeland: From 1982 to 1997, we lost about 10.7 million acres of rangeland nationwide. That's why protecting our public rangelands is so important. The Forest Service manages about 75 million acres of rangeland in grazing allotments—about 40 percent of the entire National Forest System. In 2000, we had 7,494 permittees, including maybe a quarter or more of the roughly 20,000 small ranchers in the West.

Over the past century, we have built strong relationships with ranching families. I think that has worked well for the land. Although the wrong kind of livestock grazing has hurt some public lands, we've seen improvements in overall rangeland health over the past century *and* over the past 20 years. That's been due to the impact you professionals have had through your management expertise. Today, only 1 acre in 7 is in poor or declining condition. The improvements have come from working closely with our permittees to manage the land for the *right* kind of grazing.

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<sup>&</sup>lt;sup>9</sup> Hank Kashdan, "Fiscal Year 2004: President's Budget, USDA Forest Service Highlights" (unpublished paper, 15 January 2003; Washington, DC: USDA Forest Service, Budget Staff).

<sup>&</sup>lt;sup>10</sup> USDA Natural Resources Conservation Service, "Acres of Rangeland Converted to Other Uses, 1982-97" (Natural Resources Inventory Summary Report, table 5; http://www.nrcs.usda.gov/technical/NRI/1997/summary report/).

<sup>&</sup>lt;sup>11</sup> John E. Mitchell, Rangeland Resource Trends in the United States: A Technical Document Supporting the 2000 USDA Forest Service RPA Assessment (RMRS-GTR-68; Fort Collins, CO: USDA Forest Service, Rocky Mountain Research Station, 2000), p. 39.

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On much of the range, livestock grazing can be better for the land than no grazing at all. That's because our rangelands evolved with disturbances such as fire and grazing by wild ungulates. We've lost those disturbances to a considerable degree, but we're learning that the right kind of grazing can be something of a surrogate. 12 We need the ability to use grazing as a tool, and that means we need our permittees.

Unfortunately, the West is growing so fast that urban developers are snapping up as much ranchland as they can. Most family ranchers want to stay on the land, but many are under growing pressure from debt, drought, and environmental lawsuits to sell out. 13 From 1988 to 1999, the number of ranchers who lease lands managed by the Forest Service and BLM dropped by 20 percent. From 1982 to 1997, more than 3.2 million acres of rangeland were converted directly to developed land—condominiums and ranchettes.<sup>14</sup>

That's bad for the land in a number of ways. Water resources in the arid West are already stretched thin; the Colorado River, for example, is oversubscribed. <sup>15</sup> Well-managed ranches can protect watersheds far better than even the most careful urban or suburban development. Ranches also protect critical habitat. Large animals such as elk use national forest lands in the summer and migrate to lower elevations in the fall. Without winter range, it doesn't matter how good the summer range is on national forest land—the animals are gone.

As ranches turn into ranchettes, as rural subdivisions erupt across the West, many native species are declining and being replaced by species adapted to human habitations. One scientist who has studied the problem is Richard Knight, a wildlife conservationist at Colorado State University. He put it this way: "Rather than lark buntings and bobcats, we will have starlings and skunks. Rather than rattlesnakes and warblers, we will have garter snakes and robins. Is that the West we want?",16

I think the answer is no. We need to conserve all the values and benefits that we get from our rangelands, including our native wildlife and our rural lifestyle. Both are part of what it means to be American.

#### Rising to the Challenge

I think we *can* conserve our rangeland heritage, both natural and cultural—but only if we can learn to work together. It's easy to put on the White Hat and fight the Good Fight, confident of

<sup>&</sup>lt;sup>12</sup> Dan Dagget, Beyond the Rangeland Conflict: Toward a West that Works (Flagstaff, AZ: Good Stewards Project, 1998), pp. 10-11.

<sup>&</sup>lt;sup>13</sup> Paul Rogers, "Bit Players Losing Home on the Range," *Mercury News*, 7 November 1999, p. 28A.

<sup>&</sup>lt;sup>14</sup> USDA Natural Resources Conservation Service, "Acres of Rangeland Converted to Developed Land, 1982-97" (Natural Resources Inventory Summary Report, table 5: http://www.nrcs.usda.gov/technical/NRI/1997/summary report/).

<sup>&</sup>lt;sup>15</sup> T.R. Reid, "Troubled Waters: Fight Brews Over Mighty Colorado River," *The Washington Post*, 19 January 2003, p. A-3. <sup>16</sup> Sherry Robinson, "Finding Common Ground," *Albuquerque Tribune*, 28 January 2002.

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our own self-righteousness in the battle against Evil. It's much more difficult to sit down together with our adversaries and figure out what we have in common. It's more difficult to try and work through what are really some very complex issues. It's easy to throw out slogans—remember this? "No more 'moo' in '92" and "Cattle-free by '93," so "Condos galore in '94." I think we need to get beyond that. We need to collectively acknowledge the complexities and multiple dimensions of these rangeland issues. Then we need to collectively see how we can prevent the different values on the land that we *all* care about so much from eroding.

I like the way one thoughtful environmental activist put it: "Instead of telling one another what to do, perhaps we should be saying what we want." When people sit down together, they can be surprised to find that they want many of the same things. Who doesn't want lots of healthy native vegetation? Who doesn't want clean streams and streambanks thick with vegetation? Who doesn't want to see lots of elk, deer, and other wildlife? If people can agree on such long-term goals for the land, then it becomes simply a matter of how to reach them.

Rangeland professionals like you can play a key role in bringing people together. You understand the complexities of the issues, so you can help explain them. You can capitalize on your relationships with both sides to be a catalyst for collaboration. Examples include the Quivira Coalition or the forage reserves in New Mexico and Arizona. I'm proud of the role the Forest Service plays in these collaborative initiatives. We need to learn from them how to generate incentives to perpetuate and institutionalize these great ideas.

In conclusion, here's what I envision for the Forest Service: We want all rangelands progressing towards a healthy condition—a condition that provides for a diverse landscape valued for diverse benefits. We want our program to garner the support and respect of the many stakeholders who have an interest in these lands. I think working together for these common goals holds the hope for a better future—for a rangeland program that is synonymous with rangeland health.

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<sup>&</sup>lt;sup>17</sup> Dagget, p. 8.