rizzly-bear habitat ranges from southeast North Dakota westward to the California coastal foothills. But today the species' recovery area centers in and around Yellowstone National Park. Exact boundaries of the recovery zones are difficult to determine. Around the park is an area defined as the Greater Yellowstone Ecosystem. The management of the land inside and outside the park reflects starkly different perspectives. Inside park boundaries, the land is managed to

let Mother Nature take the lead. "Watch the Ecology" is the management mode. "Manage the Ecology," is the mode on the surrounding multiple-use U.S. Forest Service (FS) lands.

Some people want the multiple-use lands managed as parks. I refer to these people as eco-emotionalists. In pursuit of their goals they allow their emotions to defeat common sense and science. One of those goals is the redesignation of FS land as wilderness. The objective is to "eliminate multiple uses of public land." Translation: restrict or wipe out logging, mining, and grazing.

The Endangered Species Act serves as the essential tool that eco-emotionalists use to create de facto wilderness. By claiming that certain species need special protection, they conclude that other uses must be halted or restricted. As a result, areas managed by the Forest Service were reevaluated, and key government agency employees launched an effort to transform as much formerly multiple-use land as possible into de facto wilderness. Errors and false data drove the decisions, and the false data were used to redefine one species of pine tree as another, so that grizzly habitat could be expanded to suit the fantasies of the eco-emotionalists.

Although limber pine (*Pinus flexilus*) and whitebark pine (*Pinus albicaulis*) are almost indistinguishable, they have a significant difference: their cones are different and they do not produce pine nuts (seeds) in the same way. Limber pine cones open and scatter seeds. Rodents and birds eat most of the seeds. Whitebark pine cones hold onto the seeds and fall to the ground, their nutritious seeds protected by the cone scales. The cones are usually sealed with waterproof, resinous pine sap. Squirrels and chipmunks assemble caches of the whitebark pine seeds for later use.

Whitebark pine-cone seed caches are especially important to grizzly bears. If white-

NUTS.

Whitebark pine nuts, that is; essential for grizzly bears and eco-emotionalists. By Terry Amrein

bark pine nuts are in short supply, the grizzly bears become more predatory because of the loss of nut nutrition. Hungry grizzly bears need to eat something else, maybe some meat, to make up for the lack of pine nuts. This situation represents additional danger to animals and people.

In the Bridger-Teton National Forest (mostly south of Yellowstone), and in the Shoshone National Forest (located mostly

east/southeast), grizzly expansion areas have been repeatedly and officially delineated, expanded, expanded then again. This process convinced me that grizzlies were being harnessed to the effort to stop multiple uses on vast areas of public land. These areas had been previously evaluated and rejected for wilderness designation. Obviously, this rejection did not please certain powerful eco-emotionalists. Unable to expand the bear's habitat any other

rancher, outfitter and a zoology graduate of the University of Wyoming, where he and I studied together.

Gene knew about my knowledge of the trees from those shared experiences. He and I attended Jackson Hole High School together in the early 1960s and were often together at UW in Laramie. I spent six years there studying range ecology and watershed management under Dr. Alan Beetle. After the Cheyenne meeting, Gene called me to ask about the map of the whitebark-pine areas

that Moody had unveiled. He asked specifically about the trees in the Hoback River drainage. He remembered that, when we were in college, we'd hunted together in the area, and I had pointed out to him that the trees in the Hoback River drainage included the limber pine. Gene told me that the area was about to be designated a de facto wilderness because someone working for the government claimed to have whitebark pine where it



Whitebark pine cones (left of dollar bill), found above 8,000 feet, are of great importance to wildlife, producing large, nutrient-packed seeds. Cones are about 2" long, dark purple, tightly clasped and sealed by gummy pitch. They don't open on their own. Limber pine cones (right of dollar bill) are found in dry forests dominated by Douglas fir and juniper between 5,000 and 8,500 feet. Cones are 5" long, tan or light brown, with scales that open at maturity. Limber pine are common in the Greater Yellowstone Ecosystem.

way, they simply "changed" limber pine into whitebark pine.

This redesignation of one pine species as another surfaced in February 2000. Gene Linn, then president of the Jackson Hole Outfitters Association, attended a meeting in Cheyenne at which Wyoming Game and Fish employee Dave Moody presented a map of the newest version of the expanded grizzly habitat. Gene is a third-generation Wyoming had never before been seen. He asked me to look into the issue.

I called Dave Moody, who claimed that the map he'd presented was an official and accurate Forest Service map, but that he no longer had it. Nor could I get a copy. I then called the local Bridger-Teton National Forest (BTNF) office. They informed me that they did not have a copy of the map and that I could not get a look at it. The map, they said,



Grizzly bears (Ursus arctos horribilis) are found in the Rocky Mountains. They eat meat when it's easy but like fish and berries and the energy-rich seed produced by whitebark pine. Ninety percent of their diet may be plants, with their habits influenced by seasonal variation in available food.

had been generated by FS employees from the Shoshone National Forest in Cody. I called that office and eventually spoke with the man who said that he was the one who had generated the map. He told me that he'd used satellite data to identify the area where the whitebark pine grows. But he eventually conceded that from the satellite photos, he could not tell limber pine from whitebark pine. Despite this inconvenient truth, he had agreed with someone to drop the limber-pine designation and label it all whitebark. Is this scien-

tific integrity? This question of where whitebark pine trees are really flourishing is important for grizzlies. Limber-pine area is hungry-bear area. Not surprisingly, this instantly created grizzly expansion zone includes a lot of domestic livestock and suburban fringe areas. Logging, grazing, and natural-gas and oil production are important parts of the economy. Favoring hungry bears in forest management decisions would impact the local economies dramatically, and both the mapmaker and I knew that, as did the people behind the decision in the Forest Service.

I wanted to know how far up in the Forest Service this mendacity went. I had been getting the runaround too often in obviously coordinated efforts. So I laid a plan to find out which forest rangers lied to me about the trees. The results were eye opening. I was told at one point by a ranger that limber pine and whitebark pine actually are the same species. I knew he was wrong but, even so, I checked with experts in plant DNA, who verified that the DNA of the two trees is totally different. They are unquestionably two different species.

In March 2002, a public meeting was held in Jackson to discuss the expansion of the grizzly territory. At the end of the meeting, I confronted the BTNF forest supervisor, Kniffy Hamilton, with the information that the identification of the limber pine was an error. I explained that I did not wish to embarrass the FS employees who had made the mistake, but that I did want to be sure that the error was corrected. She dismissed me, claiming I was in error, I did not know the trees, and I hadn't been up to timberline to see which trees were there.

Before I was old enough to get a hunting license, I took annual pack trips to remote areas of the Gros Ventre Mountains on the north side of Hoback Basin. When I was old enough, I hunted there. When I was old enough to guide other hunters, I guided trophy hunters around the tops and near tops of those mountain ranges. During my college years in the autumn, to make some spare cash, I continued to guide hunters in the region. I studied trees while guiding trophy hunters. At 21 and still in college, I took a summer job with the U.S. Geological Survey to make new topographic maps of the area. I

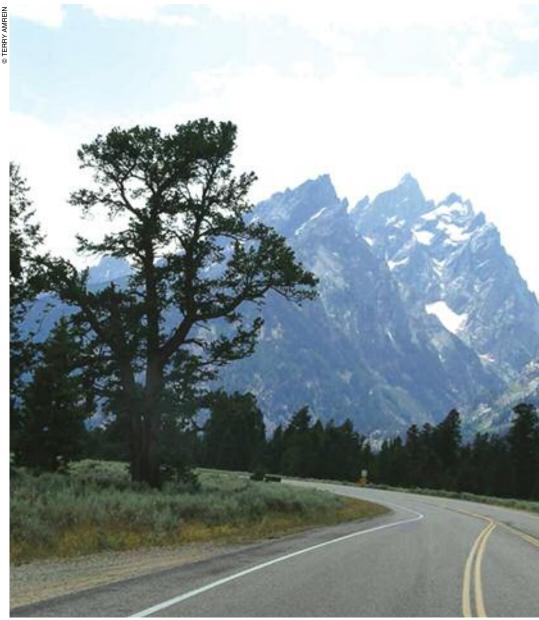
"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it's the only thing that ever has." uc maps of the area. I was personally involved in the fieldwork, being the kid who searched for the section corners and held the elevation rod for the transit. After college, I got an outfitter's license and did more guid-

ing, most of it on the higher hills and mountains around Hoback basin. So from my pre-teen years to the day I met Kniffy Hamilton, I had never stopped examining the trees from timberline down to the valley floor.

I realized that Ms. Hamilton was not inviting me to discuss the issues. She was telling met to sit down and shut up. Instead, I pointed out that, with the Global Positioning System, we could easily determine where the whitebark pine really are. I invited her to go into the northern Wyoming range or Gros Ventre range, and when she found one, to mark its position. I would then return to that location and verify the species of the tree. If she had a whitebark, I would happily acknowledge it, but if she had a limber pine that she wanted to call a whitebark, we would acknowledge that too. She never got back to me.

Eventually, the FS rangers admitted that both the Wyoming and Gros Ventre ranges have considerable amounts of limber pine. They also admitted that, while small pockets of whitebark pine might indeed exist in the areas and along some high ridgetops, limber pine is the dominant species of pine on many of the windblown slopes and ridges of the mountains in western Wyoming.

In the years since my meeting with Ms. Hamilton, Bridger-Teton National Forest employees have tried to propagate and plant whitebark pine trees where they have never been found. This effort presents serious problems for the ecosystem, and raises two big concerns. First, to change the species of trees that grow in a forest is a mighty big ecological transformation, one that should occur only after serious public review and approval. Second, even if whitebark pine trees are introduced, it will take decades before the trees will mature enough to produce much in the way



Teton Mountains and limber pine, near Jackson Hole, Wyo. Teton National Park includes limber pine, but no whitebark pine. For years, they have been "confused." Limber-pine area is hungry-bear area. Not surprisingly, the instantly created grizzly expansion zone includes a lot of domestic livestock and suburban fringe areas. Logging, grazing, and natural-gas and oil production are important parts of the economy. Favoring hungry bears in forest management decisions would impact the local economies dramatically.

of pine nuts. So the grizzlies in the expansion zone will not be served for many years.

The attempt to redefine one species of pine tree as another to suit the eco-emotionalists demonstrates the extent to which some Forest Service employees have abused their power. I believe the actions of these government employees are violations of their sworn duties. I believe that they are deliberately violating other people's rights to further their own agendas.

Only public awareness of the acts of the Forest Service officials can change the situation, and awareness must be followed by official investigation. But even then, will the people who wanted to call the limber pine a whitebark pine be promoted, demoted, or quietly ignored until the public loses interest? If the outcome is the latter, the only winners will be the eco-emotionalists and the grizzly bears. ■

Terry Amrein is a 60-year-old Wyoming rancher, guide, and breeder of Indian Appaloosas. He advises others through his business, Sage Advice, and says that ranching is basically three things: (1) Catch sunlight energy and make plants grow; (2) Turn the plants into animals; and (3) Turn the animals into money.