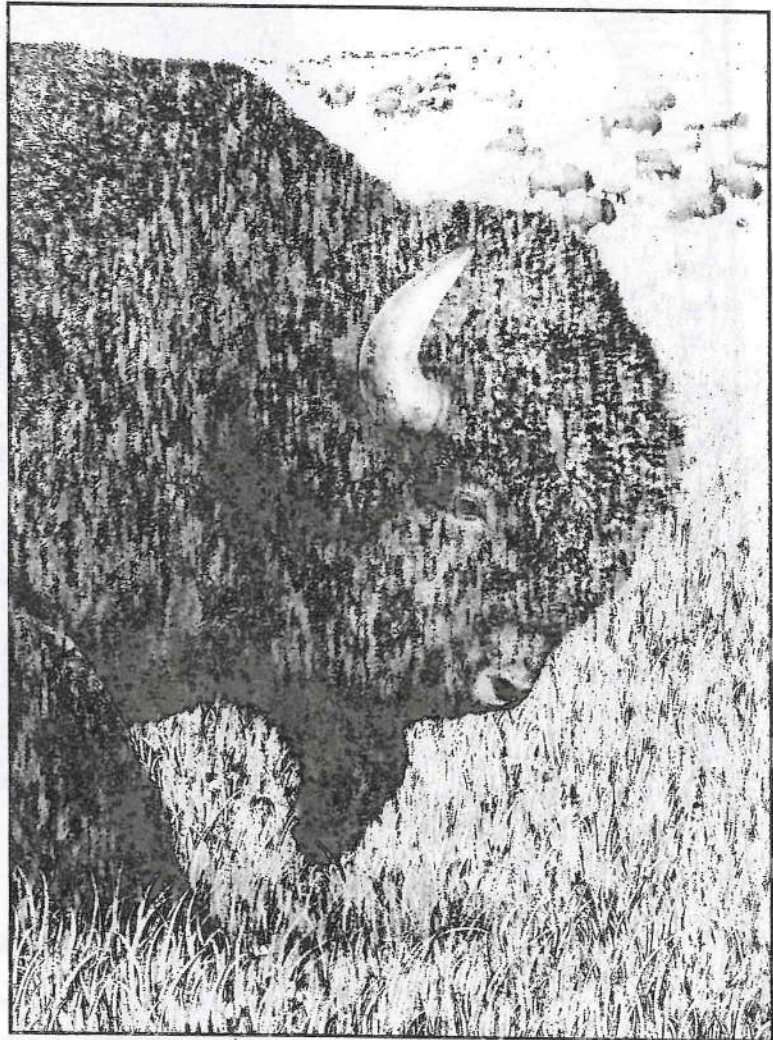


Conserving Biodiversity

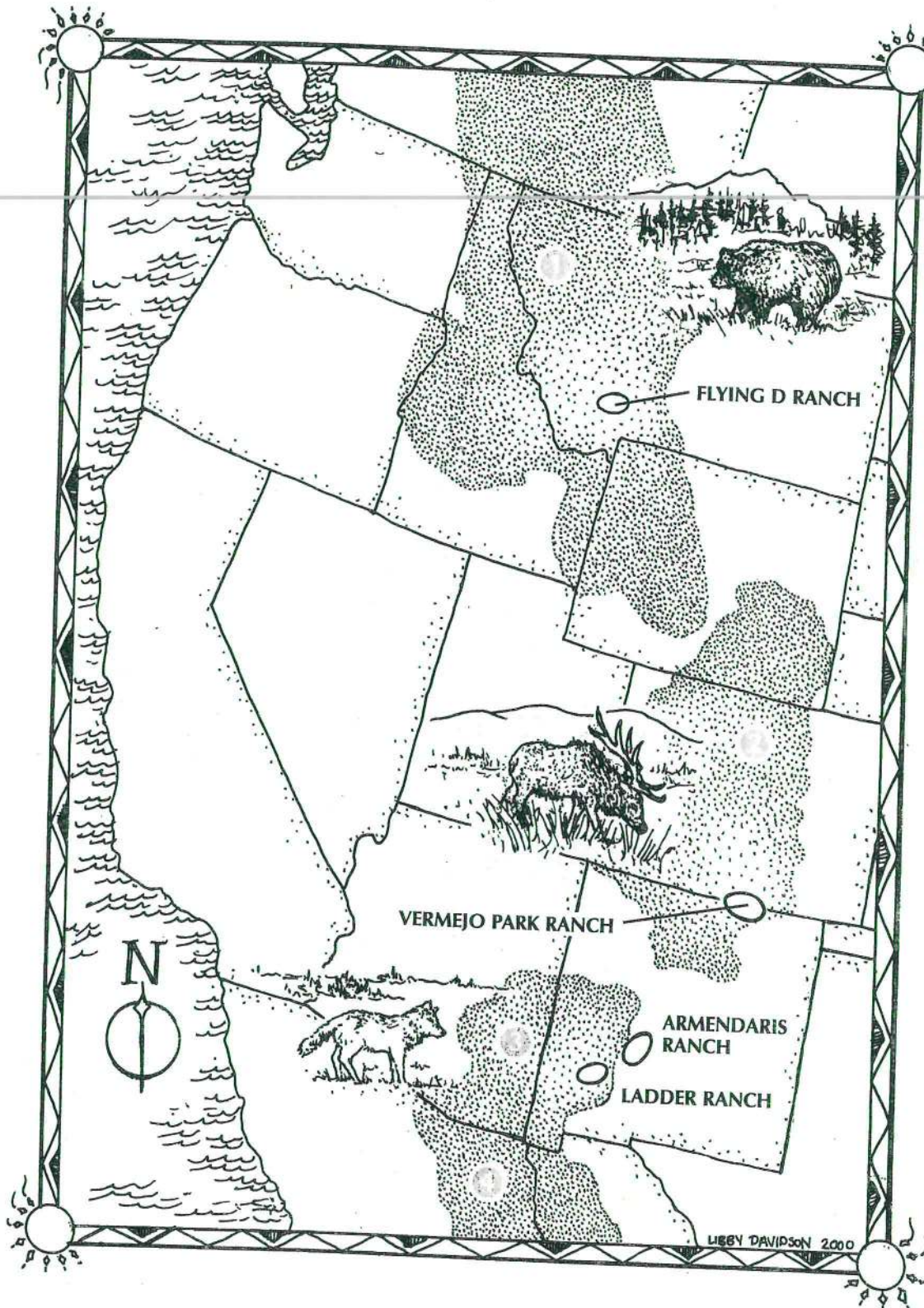
On and Beyond the Turner Lands

by Mike Phillips



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FIRST MET TED TURNER IN 1995 when he visited Yellowstone National Park where I was directing the wolf reintroduction effort for the National Park Service. I vividly remember the park superintendent's call the night before Ted's arrival arrived to relay his schedule and express an expectation that I would provide him an opportunity to observe wolves and grizzly bears. I hung up the phone, unconcerned about our odds of seeing wolves: we had nine animals in captivity that needed to be fed. And during Ted's visit, providence provided us a good look at two grizzlies while we were hauling elk quarters to the Rose Creek pen.



Turner Ranch Lands within Proposed Wildlands Networks

(approximate locations)

- 1 Yellowstone to Yukon Conservation Initiative
- 2 Southern Rockies Reserve System
- 3 Sky Islands Wildlands Network
- 4 Sierra Madre Occidental Biological Corridor

During the day we discussed the world's woes. It became apparent that Ted believed that the accelerating loss of biological diversity ranked near the top of the list of global problems. He expressed concern that the destruction of Nature would eventually have profound and negative consequences for all of humankind. He realized that every year thousands of native species and atten-

dant ecological interactions, fine-tuned by time and place, disappear due to human action—losses so severe that the redundancy and certainty of Nature is being stripped away, wearing thin the lives of millions. He expressed frustration over this trend, which, as the Yellowstone wolf project illustrated, is reversible. He understood that restoration is an alternative to extinction.

We discussed the factors that drive the extinction crisis. He agreed that the most important single cause was habitat loss, mostly on private land, that occurs as owners seek to maximize economic gain. This troubled Ted because he understood that arresting the extinction crisis will require the keen involvement of private landowners.

Later, and after conferring with his son Beau and other family members who are equally concerned about biodiversity loss, Ted realized that his active involvement in the conservation of imperiled species could improve the recovery prospects for many plants and animals. As owner of more than 1.5 million acres, he could set an example to other landowners that coexistence with endangered species was possible, and by doing so illustrate the utility of the Endangered Species Act. These possibilities prompted the family to form, in June 1997, the Turner Endangered Species Fund (TESF) and Turner Biodiversity Divisions (TBD), and to bring me on board to oversee the activities of both.

The Fund and the Divisions are dedicated to conserving biological diversity by working to ensure the persistence of imperiled species and their habitats, with an emphasis on private land. We concentrate on carnivores, grasslands, plant-pollinator complexes, species with historic ranges that include Turner properties, and dissemination of credible scientific and policy information about biodiversity conservation. Our projects, which are based on the principles of conservation biology, involve state and federal agencies, universities, non-governmental organizations, and private citizens. We operate on the belief that wrapping many minds around a problem is a certain route to success. In our endeavors, whether we seek to manage extant populations or restore extirpated species, the ultimate goal is population persistence with minimal management. We believe that self-sustaining populations of native species indicate a healthy or at least a recovering landscape.

The TESF is recognized by the Internal Revenue Service as a nonprofit charity. Such recognition provides a tax-exemption as long as TESF funds are used solely for projects involving species considered Threatened or Endangered by a state or the federal government. In contrast to the Turner Foundation, which is a grant-making charity, the TESF is an operational charity that helps conceive, design, and implement field projects. The Biodiversity Divisions were formed to focus on imperiled species (and their habitats) that are not listed as Threatened or Endangered. According to Ted, the Divisions are part and parcel of responsible ownership.

Currently the TESF and the TBD are involved in roughly two dozen projects including reintroduction efforts for plants,

birds, fishes, and mammals. The flagship effort at present addresses conservation of migratory pollinators and their plant partners along a 1500-mile migration corridor that stretches from the southwestern US to southern Mexico. This campaign is being orchestrated by the Pollinator Conservation Consortium based at the Arizona-Sonora Desert Museum.

Although our fieldwork emphasizes Turner properties, we are diligent to launch projects that generate benefits transcending Turner land boundaries. Several of our projects dovetail nicely with well-known, large-scale conservation area design initiatives. These include:

Yellowstone to Yukon Reserve Design and the Flying D Ranch.

The Flying D Ranch encompasses 113,000 acres and is the largest tract of private land in the greater Yellowstone ecosystem. The "D" is one of the best-known ranches in the West; upon its purchase Mr. Turner donated a conservation easement to The Nature Conservancy. The ranch is dominated by montane rangeland and spruce forests and shares a border with the Lee Metcalf Wilderness of the Gallatin National Forest. Maintaining the health of the resident elk herd is an important management objective for the ranch. In collaboration with Montana Fish, Wildlife, and Parks, the ranch provides keen recreational opportunities to elk hunters who use adjacent public land throughout the season and to hunters who participate in the D's late-season cow elk hunt.

Grizzly bears and wolverine have been sighted on the ranch, and during the winter of 1998-99 TESF biologists observed one wolf and detected wolf tracks on three other occasions. Wolf tracks were also detected in February of this year. In sharp contrast to the situation on most private land, large carnivores are welcome on the D. Recently the TESF submitted a proposal to the US Fish and Wildlife Service (USFWS) to assist with: 1) monitoring gray wolves that settle in the public/private land interface in the northwest corner of the greater Yellowstone ecosystem (with an emphasis on the Flying D Ranch), and 2) developing aversive conditioning techniques to reduce livestock depredations.

Integrating the D into the mix of lands available to large carnivores and utilizing the field skills of the Turner Endangered Species Fund greatly advances carnivore conservation, a central feature of the Yellowstone to Yukon initiative.

Southern Rockies Ecosystem Project and the Vermejo Park Ranch.

Vermejo Park Ranch (VPR) encompasses 580,000 acres along the southeastern border of the Southern Rockies Ecosystem Project's conservation area design bound-

ary. Elevations at the ranch range from 6000 to 12,000 feet. Because of this elevational heterogeneity, myriad ecotypes can be found on the property including short-grass prairie, piñon-juniper woodlands, ponderosa pine forests, mixed conifer stands, spruce-fir forests, and alpine habitats. The large size and great diversity of the ranch has long been recognized; in the past, the Department of Interior considered Vermejo as a possible addition to the National Park System.

Like all Turner properties Vermejo is managed to ensure the persistence of native species. Here we have several important imperiled species projects in place (e.g., restoration of black-tailed prairie dogs and black-footed ferrets). Moreover, the ranch provides a grand opportunity to advance wolf recovery, a central feature in the southern Rockies reserve design. Without doubt, Vermejo can support a self-sustaining population of wolves that would produce dispersers which would settle other suitable sites throughout the southern Rockies. To fully appreciate Vermejo's potential it is useful to note that:

- the ranch is five times larger than Isle Royale, which has supported a wolf population since the late 1940s when a few wolves crossed Lake Superior via an ice bridge and settled the island,
- the density of Vermejo's elk herd compares favorably with the density of Yellowstone's northern range herd, which supports the densest and arguably the healthiest wolf population ever studied (health being measured by body weights and reproductive performance),
- poaching and accidental human-induced mortalities (e.g., collisions with vehicles) would be virtually non-existent because access to the ranch is strictly controlled, and
- the ranch is well within dispersal range of public land where wolves should receive priority consideration (e.g., the San Juan National Forest).

The Turner Endangered Species Fund is certain that the Vermejo Park Ranch can serve as a nidus for wolves settling vast stretches of wildlands in the southern Rocky Mountains and beyond. Indeed, reintroducing wolves at Vermejo should greatly facilitate the restoration of a wolf population that is continuous from Canada to Mexico!

Sky Island Wildlands Network and the Armendaris and Ladder Ranches. The Armendaris Ranch (335,000 acres of Chihuahuan Desert grasslands and desert scrub, riparian habitats along the Rio Grande River, and the Fra Cristobal

Mountains) and the Ladder Ranch (250,000 acres of mixed desert grassland, riparian areas, piñon-juniper stands, and mixed-pine forests) are situated along the northeastern edge of the Sky Island Wildlands Network (SIWN). The diverse habitats, elevational heterogeneity, large size, and proximity to public land of these ranches—as well as our emphasis here on native species conservation—ensure that they will always figure prominently in landscape-scale conservation efforts in the region.

Predictably, SIWN emphasizes the restoration of carnivores, and efforts at the Ladder Ranch contribute mightily to this end. For example, at the Ladder we maintain a captive breeding facility for Mexican wolves for release to the wild by the US Fish and Wildlife Service. Additionally, the TESH fully supports the reintroduction of Mexican wolves into the Gila National Forest, hopefully on the Ladder's allotments, and has offered the services of a biological technician to assist with radio-tracking. Finally, the Ladder's management team greatly improved the suitability of the region for large carnivores by developing an agreement with the US Forest Service for removing livestock from the ranch's two allotments, which cover 70,000 acres in the Gila's Aldo Leopold Wilderness.

THE TURNER ORGANIZATION HAS MADE GOOD PROGRESS conserving native species during the last few years. However, we realize that much work remains if we are to establish our efforts as persistent forces and properly integrate Turner properties into large-scale conservation reserve design planning. We recognize that these tasks will be challenging because emphasizing private stewardship of biodiversity is new, the problems are complex, and effective solutions require broad-based socio-political, geographic, and fiscal considerations. The difficulty of the tasks, however, does not diminish our substantial resolve, which is based on the belief that any real solution to the extinction crisis will rely on the genius and determination of humankind. Accordingly, we are determined to contribute by establishing a new measure for conserving the wondrous diversity of life on Earth. ☾

Mike Phillips has been the executive director of the Turner Endangered Species Fund and coordinator of the Turner Biodiversity Divisions since their inception in 1997. He has worked on wolf recovery and research since 1980, including the Yellowstone wolf restoration project and the red wolf recovery program. He lives in Bozeman, Montana.