



From Albuquerque to Africa

SHARING A KNOWLEDGE OF WILDLIFE AND HABITATS

By Gail Tunberg



Credit: Jim Thorpe

Gail Tunberg was Regional Wildlife Program Leader for the U.S. Forest Service's Southwest Region until her retirement in 2011.

Most of us in the wildlife profession choose our retirement date. We put in the years, feel we made a difference, and at some point, are ready to pass the baton. But some of us, like me, have our retirement date chosen by circumstances beyond our control. In my case, I guess I can say that my surgeon set my retirement date.

In my work as Regional Wildlife Program Leader for the Southwest Region of the U.S. Forest Service (USFS), I traveled quite a bit to improve wildlife habitat on 11 national forests and three national grasslands, forging partnerships along the way to make it happen. But this work became increasingly tough due to rheumatoid arthritis. I underwent 20 surgeries to repair or replace degenerated joints. Then, in 2011, my surgeon made it clear that my next surgery would require months of recuperation. It was sobering news. The Forest Service was offering voluntary early retirement without penalty. I qualified, retired in September 2011, and spent my first year of retirement repairing and replacing joints.

Earlier that year, however, my husband and I had taken our first hunting and photography safari to South Africa. We toured Kruger National Park with Louis Stoffberg, a hunting guide who also had an agriculture background and birding skills. In addition to spotting more than 50 bird and wildlife species—including lilac breasted roller, saddle-billed stork, Wahlberg's eagle, and the megafauna (elephants, giraffe, lions, more)—we learned many species of wildlife, trees, shrubs, grasses, and forbs. We also noticed many down and damaged trees in Kruger.

Louis explained that the number of elephants has increased in the park and they frequently push over trees to eat the canopy leaves. He added that the smaller mopani tree was colonizing where taller trees once grew. Mopani form a dense canopy shading out saplings of larger species. From Louis' perspective, hunting to control elephant numbers could be a valuable conservation tool to prevent the destruction of big trees in Kruger.

After touring the park, we drove north to Limpopo Province to hunt nyala, kudu, impala, wildebeest, warthog, and blesbok—an unforgettable and healing experience. I went from feeling like a victim hunted by a silent predator (my illness) to being a predator stalking my own prey. Talk about empowerment. I don't know of any other situation that heightens personal awareness like hunting. Walking and stalking an animal for hours with the knowledge that it has the ability to hurt or kill you slams everything into focus. It takes you to the basics, life and death.

I hunted on two private ranches, and was impressed with the efficiency of their animal processing. Every bit of a harvested animal is used, with some meat and parts made available to local villagers. To remain economically viable, ranch owners often diversify their operations to include livestock production, game ranching, safari hunting, wildlife viewing, even spa experiences. Some also own diamond or platinum mines, with mining revenues invested in ranch operations and giving owners



Credit: John Tunberg

With hunting guide Louis Stoffberg, Gail Tunberg displays the fruits of her African safari—a one-ton eland bull she harvested near Christiana in Northern Cape Province, South Africa. Tunberg and her companions ate some of the meat, with the rest donated to other camp guests, staff, and families.

the funding to experiment with land-management methods. That's where my husband John and I were able to offer some suggestions based on experience.

Sharing Professional Knowledge

Both John and I have experience with land management and prescribed burns (John is the State Rangeland Management Specialist with Natural Resources Conservation Service in New Mexico and a prescribed burning instructor). Fires commonly occur in South Africa, but not everyone starting them shares the same goals and objectives. Villagers start fires around the village perimeter to discourage snakes. Farmers start fires to control weeds and clear crop residue. Ranchers use fire to improve forage quality and quantity, and to encourage wildlife and livestock distribution across the ranch.

One ranch manager we met, Juan, was burning small (60-hectare) blocks in rotation at the rate of one or two blocks annually. We drove by one of his recent burns and discussed how burn size, season, and fire intensity affected regrowth, which in turn affected wildlife grazing and browsing. Juan said he was concerned that prescribed burning might not be a good tool because “the animals are eating all the grass.” I asked him what would happen if he burned more hectares at one time, or burned several blocks during the same season. He said the owner was nervous about starting fires, and Juan doubted he could get approval to increase burning. He also said he relied on personal observations to determine the vegetative and wildlife response to burning. I was able to demonstrate a simple photo-point transect that could help monitor vegetation before and after prescribed fire—a tool Juan felt might convince the ranch owner to increase prescribed burning.

John and I had other fruitful discussions with Juan about burning. We explained how local ranchers could form ‘burn associations’—groups that buy and share the necessary fire-protection gear, tools, and equipment as a means to reduce costs. Local ranchers and their staff then assist with prescribed burning, and individual landowners are able to burn larger areas, or burn more frequently, appropriate to their management goals.

Our discussions with Juan expanded beyond fire to other management challenges on the ranch, such as how to prevent rhinoceros from tearing up water troughs. Although rhino are new to me, I have experience with water systems used by bison, so I

Wildlife Visions: Retirement Allows Time for Art

I began drawing wildlife when I was old enough to hold a pencil. Art and photography became my favorite subjects, second only to biology. In college, I took drawing and scientific illustration courses to fulfill core requirements, eventually trading my wildlife drawings and illustrations to students in return for oil changes and minor repairs on my aging car.

By the time I was 30, the ravages of rheumatoid arthritis made it painful, or impossible, to hold pens and pencils. Several years and nine hand surgeries later, I started drawing again. Now, retirement is allowing me to pursue my art in earnest. I've done some colored-pencil drawings based on photographs of wildlife I saw in Africa, and recently I enrolled in my first oil painting class, where the instructor is teaching me to paint with a looser style.

Last winter I launched a fine arts [website](#) to display my work, and another [site](#) for production and sales. I invite you all to visit both sites to catch a glimpse of what I've seen in Africa and right here at home.



African Lioness, oil painting by Gail Tunberg



Kudu Bull, colored-pencil drawing by Gail Tunberg

sketched out a concrete, in-ground design and another of an in-ground tank lined with butyl rubber that I thought might work. Juan mentioned that rhinos have sensitive feet and therefore avoid troughs on rocky ground, so we discussed a design with large rocks around troughs, unwelcoming to rhino but with space for access by smaller species. Clearly there is nothing like The Wildlife Society's *Wildlife Techniques Manual* to help managers, most of whom, says Juan, gain knowledge through “bush telegraph” (word of mouth). If the books weren't so heavy, I'd take several copies next time I go!

John and I did return to South Africa in 2012 to hunt in Limpopo and the Northern Cape Province. On that trip I brought Louis and Juan copies of *The Wildlife Professional* magazine. They were happy

to see a magazine that featured wildlife professionals sharing information, techniques, and stories. Juan's wife Minette, who is a veterinarian, was especially interested to read an article about new tranquilizers for hippos ([spring 2012](#)) as she was working on new tranquilizer combinations for rhinoceros. It seems there's a market abroad for the expertise that TWS can share through its books and other publications.

After leaving the Northern Cape we drove to Pretoria to join South African professionals we had met 11 years earlier when they toured the southeastern U.S. for six weeks to learn about arid land management. John had spent two weeks showing the

Back on the Home Front

At home in New Mexico, I remain an active TWS member and also volunteer with various organizations to apply my land management experience. For example:

Meadow Restoration. I'm working with the National Wild Turkey Federation (NWTF) to develop a meadow restoration plan on the 160-acre Bluebird Mesa Wildlife Management Area, administered by the New Mexico Department of Game and Fish (NMDGF). This WMA is an old farmstead with much of the land plowed and seeded with pasture grass for cattle grazing. The natural stream was diverted above the meadow to dry the ground for plowing. Soil and gully erosion, in addition to historic dewatering, are causing soil drying to the extent that the meadow is being invaded by dry-site species such as juniper, Gambel oak, and ponderosa pine.

Volunteers with NWTF constructed a wildlife drinker for wildlife, especially Merriam's wild turkey, and we maintain the perimeter fence to keep cattle from grazing the area. The goal is to halt soil erosion and restore native meadow vegetation. Because the WMA is located within the Santa Fe

National Forest, USFS cooperation and hydrological and engineering expertise are also needed to restore the stream to its natural channel. My next steps are to meet with the agencies to discuss options for restoring the meadow and project timelines.

Riparian Restoration. As part of a collaborative project, I'm volunteering with NWTF, the Rocky Mountain Elk Foundation, and the Albuquerque National Wildlife Federation to restore the Cebolla Creek riparian area within the El Malpais National Conservation Area, administered by Bureau of Land Management. The BLM is thinning juniper and pinion pine trees in the watershed to reduce the risk of stand-replacing wildfires and soil erosion. While BLM treats the uplands, our volunteers are constructing a series of rock structures in the incised creek bottom. Steep banks up to 20 feet high limit



Credit: Dick Kreiner

Volunteering for a cause close to her home and heart, Gail Tunberg (at center) joins a team to install rock structures at Cebolla Creek in New Mexico's El Malpais National Conservation Area. The structures will improve water flow and riparian vegetation, creating habitat for species such as mule deer, turkey, and elk.

delegation agricultural practices in New Mexico's desert environments, including low-evaporation irrigation systems, water diversions, and rotational grazing of cattle to protect habitat for wildlife species such as elk and Gould's wild turkey.

Those professional connections continued when we returned to South Africa in 2012. John and I joined delegation head At Van Coller and his fiancé Erika (the Grazing and Pastureland Specialist from Kwa-Zulu-Natal Province) to tour nearly all the provinces of South Africa for two weeks, logging over 8,000 kilometers. At and Erika gave us the equivalent of a university short course in the culture, history, natural resources, and land management in South Africa, where we noted many similarities to habitats in the Southwest, such as vast grasslands with springbok and kudu reminiscent of land used by pronghorn and elk.

wildlife access to water, while stream downcutting causes dewatering of the surrounding uplands and alters vegetation to less palatable species. The rock structures help slow water flow, deposit silt, rebuild the stream bed, and restore riparian vegetation, creating habitat for species such as elk, mule deer, and Merriam's wild turkey.

Lobbying. When I was a Forest Service employee, I was only allowed to educate and inform members of Congress and the public about how proposed legislation affected our agency's mission. Stating my opinion or advocating an outcome as a federal employee would result in disciplinary action, including employment termination. But as a retiree, I use my knowledge and experience to advocate outcomes to proposed legislation that benefit wildlife and their habitats. Retired wild-lifers are no longer bound by agency policies and protocols. We can ask tough questions that agency employees can't, such as asking federal agencies why livestock are allowed to overgraze sensitive riparian areas. We can also bring political pressure to agencies that do not fulfill their land management responsibilities. Many retirees lobby

for wildlife budget increases and advocate that agencies increase their management emphasis on wildlife (see article on page 34).

To help retain my connections to TWS and fellow retirees, I recently joined the Society's Retired Wildlife Professionals Committee (see article on page 41), attending my first meeting last fall at the Annual Conference in Portland, Oregon. It was humbling to be among so many of my heroes and mentors—trailblazers whose passion for wildlife and our profession is infectious. Though travel to TWS conferences is at personal expense (a challenge for retirees), our committee uses teleconferencing and e-mails to conduct much of our business, a low-cost way to stay connected.

Retirement marked the end of one chapter of my life and the beginning of another. Yet the experiences, knowledge, wisdom, and relationships gained in the course of a career are never "retired." If we choose to, we can continue influencing wildlife management and wildlife managers. At least for me, this is true. I retired from an agency; I did not retire my passion for wildlife. ■



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