

# Managing for Turkeys

## Easterns & Rio Grandes



Photo by Jeff Parker

RIO GRANDE GOBBLER

**Johnny Cash's deep voice boomed** from the radio as Simon Winston whipped his Jeep around the disked edges of the burn site. While flames still licked at the understory deep in the trees, happenstance had the Man in Black sing, "I fell into a burning ring of fire." Without missing a beat, Winston belted out a line or two before continuing to educate me on the ins and outs of managing habitat for Eastern wild turkeys.

**"H**ere on the Winston 8 Ranch, we normally burn on a two to three year rotation. Burning this understory is one of the cheapest and most effective ways of creating good habitat for Easterns." Winston pointed to an area not yet burned. "See that? Turkeys won't go in that for nothing."

We drove further into the red dirt and rolling hills. "This is what you call a long-leaf, blue-stem ecosystem. See there? Baby chicks can maneuver around there in those bunch grasses," he said. And, according to work published by Kay M. Fleming, Texas Parks and Wildlife Department (TPWD) Natural Resource Specialist, studies show that as turkeys maneuver, they'll find as many as seven times more insects in burned native grass areas than they will in unburned areas.

Historically, Eastern wild turkeys inhabited the upland forests of East Texas, but by 1942, native populations fell to less than 100 birds. Restoration efforts began in the early 1940s and have continued since then with mixed results. TPWD initiated a 2007 field-based super-stocking program in which a total of 347 birds were translocated to four sites in East Texas. Of those, 83 found homes on the Winston 8 Ranch. The program seems to be going well, though final results have yet to be determined.

According to Jason Isabelle, author of a Stephen F. Austin State University thesis outlining the super-stocking program, the Winston 8 Easterns thrive, thanks in large part, to the ranch's active



Photo by Jeff Parker

**SIMON WINSTON** explains how effective prescribed burns are for setting back the successional state of the forest understory to create good Eastern wild turkey habitat.

burn program. Isabelle said, “Simon actively manages the forest, primarily through fire and timber harvesting. You’re going to get a really thick mid-story if you just leave it alone, and he does a great job of creating constant disturbance, which is what you have to do to manage for turkeys.”

East Texas isn’t the only Lone Star terrain where prescribed burning makes a great turkey habitat management tool. A week later, near the dry San Diego Creek bed, I hung out with Robert Sanders, manager of the Temple Ranch near Freer, as he pointed to bright green shoots springing up from a burn he did the week before. “You can already see new growth popping up, because we had good ground moisture,” he told me. Sanders has managed the Rio Grandes here for 13 years, back when he said, “there were just a handful of turkeys, maybe 30 or 40 spread out over 10,000 acres,” and fire has always played an important role.

“We try to keep this area clear here so the birds don’t have to fly down into three-foot-high buffelgrass. Fire releases a lot of seed. And when it starts to green up like this, the insects come, and that’s when you get great forage for raising poults.” Emphatically he adds, “Prescribed fire is the cheapest, best management tool out there for wildlife, especially quail and turkeys. It helps create food, controls brush and opens things up.”

In addition, preliminary findings from the South Texas Rio Grande Turkey Project, which uses GPS devices to monitor hen nesting behavior on the Temple Ranch, seem to indicate certain nesting behaviors in response to burns. The project is designed and directed by Dr.

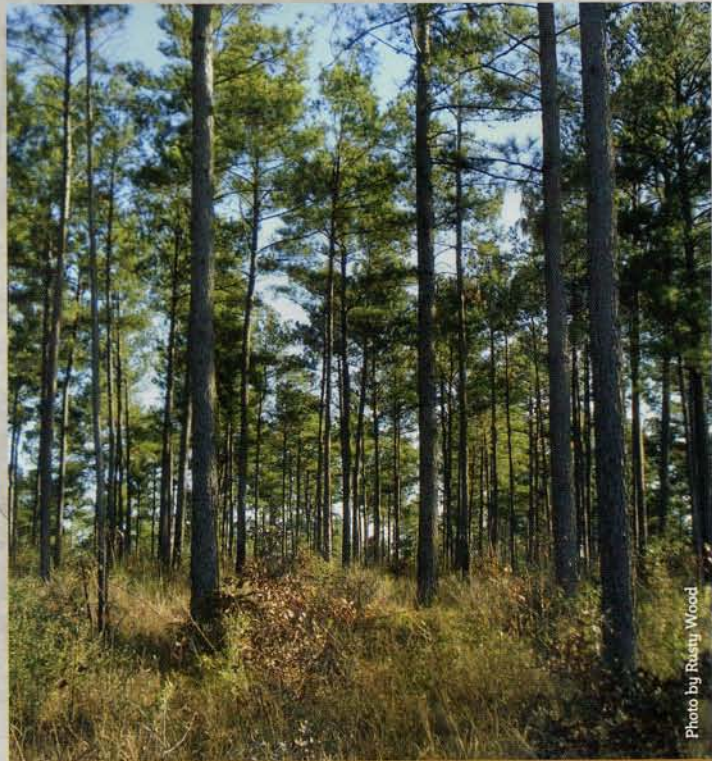


Photo by Rusty Wood

**FORESTS THAT ARE THINNED** and burned regularly provide excellent nesting and brooding habitat for Eastern wild turkeys.



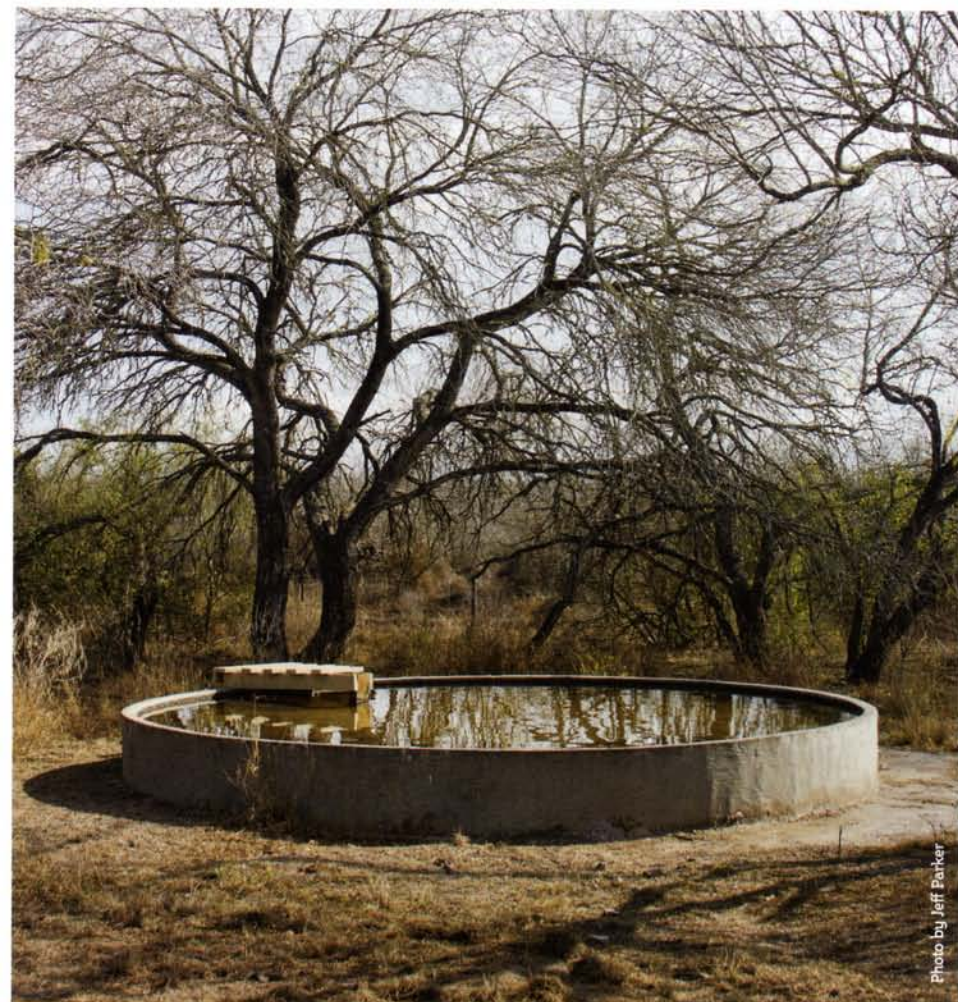


Photo by Jeff Parker

CONCRETE TROUGHS on the Temple Ranch help make it so Rio Grandes don't have to travel over one-fourth of a mile for water.

Bret Collier, a research scientist of wildlife population ecology in the Institute of Renewable Natural Resources at Texas A&M University.

"We're early on this," cautioned Collier, "but the hens seem to key in on burn areas. They tend to go to an area that was burned the year before, which I call 'one-year post-burn response areas.'" But, he stressed that he only sees this when there's been adequate precipita-

**“Prescribed fire is the cheapest, best management tool out there for wildlife, especially quail and turkeys.”**

tion, "because without adequate precipitation, the vegetative structure doesn't change," he said.

"My theory of why hens go there is that there's an excellent forb community foraged on by insects, and that is what drives poult survival during those crucial first two weeks when they need it most, before their flight feathers replace natal down," Collier said.

Those first two weeks of brooding and the incubation period that

precedes it are the most likely times for hen predation to occur. Because of that, both Winston and Sanders create ample space for reproductive activities in order to diminish nest predation and reduce the number of re-nesting attempts needed. Ultimately, that also reduces the need for a hen's long-distance movements. (Hens typically relocate to re-nest; two attempts are common, but up to four have been documented.)

Exactly where does a hen go to nest, and why there? Collier is trying to answer these questions with his GPS study. Typically, they'll search out clumps of grass or cover offering visual obstruction. "I've mainly seen them near areas that are open but near aerial cover that's real thick. It's weird, the one who has success will kind of get out of her element in that thick brush," Sanders said. One certainty, Sanders warned, is that "overgrazing can hurt you. It can destroy your nesting habitat."

Within the forested habitats of East Texas, birds often nest in thinned or burned forests, particularly those with low canopies. Isabelle said that Easterns nest throughout Winston's ranch in areas that had been burned that same winter or that same year or from previous years. "It's all a function of how quickly the vegetation re-



A GROUP OF RIO GRANDE gobblers strut down a road cut through the south Texas brush.





Photo Courtesy of Stephen Voelkel

sponds to fire," he said. "They'll pick a spot where the understory is real thick, knee-level, and that has high shrub densities."

But no matter where any turkey trots in Texas, biologists agree that when it comes to feeding them, there's no substitute for native resources. However, if the need arises to supplement seasonal inadequacies, Fleming suggests using food plots over feeders, if one can afford them.

"Plant rye grass and clover, and you'll help your deer, too," Winston said. Clover, he explains, especially makes a good winter crop for hens, because it provides Vitamin A for egg shell development. "And, if you think your turkeys are going to have to travel to find food, you might really want to think about food plots," he adds. "The less turkeys go searching somewhere else for their food, the better chance they've got of surviving."

Up in the Piney Woods, Winston showed me an open area at least 200 feet across, plentiful with blue stem, sunlight and furnished with an impoundment, which he affectionately calls, "The Duck Pond." This is where the East Texas rancher sees the most turkeys on a regular basis.

"This is a popular area," he said with a

**"It's all a function of how quickly the vegetation responds to fire."**

sweep of the hand. And no wonder. According to Isabelle, in addition to water, herein lies everything a turkey would want: "It offers a diverse habitat, a lot of native vegetation, a hardwood ridge to the west, and to the east, a pine forest. They really like to roost up in that hardwood forest, especially in the spring. Then the toms come down into that open area and court the females. This area offers the perfect combo

of resources of what a turkey needs." Wide openings in the forest play especially important roles during the spring and summer, those warm months when the birds chomp and chow down on both plant matter and protein-rich insects. In addition, such openings provide key places for courtship activities.

In the fall and winter months, the birds rely primarily on the mast produced by the hardwoods, usually found along streamside management zones (SMZs). Winston said, "SMZs are drainage areas with hardwoods. We take good care of our SMZs for lots of reasons, but one is because it's really good for the turkeys. In these areas, the water gets filtered naturally, so it's real clean. SMZs provide travel corridors, feeding areas and roosting areas. In other words, food, water and cover for the turkeys."

And, while "SMZ" is a term used in timber regions, Sanders uses a similar manage-



Photo Courtesy of Stephen Voelkel

**THIS OPEN AREA WITH GOOD BRUSH and forb diversity provides excellent nesting and brooding habitat for Rio Grande wild turkeys on the Temple Ranch.**



**“There’s a well-known phrase that says that every wildlife manager in South Texas is always busy getting ready for the next drought.”**

ment concept on the Temple Ranch since the turkeys hang around the main creek area, ranging from one-half to three-fourths of a mile on each side, except when the hens go to nest. “Even though San Diego Creek runs seasonally,” Sanders said, “This area is where things will recharge when the creek flows. The truth is that San Diego Creek is the reason we’ve got turkeys here.”

But since this is South Texas, the word “creek” can be a bit misleading. “One of my goals as a manager,” Sanders shared, “has been to get water across the ranch. We’ve put in concrete troughs and pipes that drip into San Diego Creek so that we have water sources about one-half of a mile apart, the idea being that nothing should have to travel over one-fourth of a mile for water.” Then, with a chuckle he added, “There’s a well-known phrase that says that every wildlife manager in South Texas is always busy getting ready for the next drought.”

Another South Texas challenge is lack of roosts. “Over the years, we’ve lost a lot of our roosting habitat,” Sanders said. “Because of droughts, we’ve lost about 75 percent of the sugar hackberries that the Rio Grandes prefer along our drainage. So, we came up with the idea of putting up artificial roosts.”

Currently, the Temple Ranch has three of what Sanders calls the “windmill type” (the first kind he tried) and 18 of the ones he refers to as the “telephone pole type.” He says the turkeys use all 21 of them without seeming to prefer one kind over another. And,



Photo by Jeff Parker

TEMPLE RANCH MANAGER ROBERT SANDERS built all-metal “windmill” style artificial roosts as his prototype, in part, because they’re fire resistant.



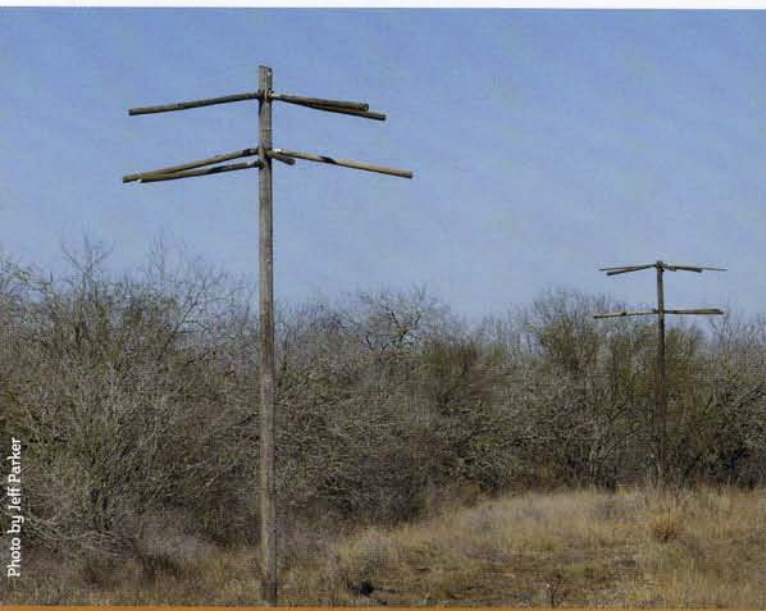


Photo by Jeff Parker



Photo by Jeff Parker

THE TEMPLE RANCH has 18 "telephone pole" artificial roosts.

s for making the branches on the roosts, Sanders explained, "I give 'em a variety of sizes to sit on, and it seems like they've used all of 'em. Anything from a round dowel to a 2x4 on edge to a three-inch fence post size."

When I asked how he chose the locales for the roosts, he told me: "Because of the habitat around them, and many times, because a hackberry used to be there. Also, I consider whether or not they can easily get to it. Can they fly down from it into a clear place where they feel safe? Some people say you need to incorporate a roost into a bunch of trees. But if you watch a turkey, you'll see that they'll sit right on the edge of a really thin branch and sway in the wind, so they aren't real covered up anyway, and so I haven't found that to be true."

"I'm also experimenting by planting some roost trees to see how they do. I've started by planting about 30 desert elm. Since the Pecos River bottom has those and a lot of turkeys, I'm going to give them a try and see what they do."

Suddenly, a gust of wind whistled across leafless branches of winter mesquite. The skies grew darker, and Sanders smiled and inhaled deeply. "Ah, I love the smell of freshly burnt country, especially when there's thunder in the distance."

Just then, a host of toms and jakes somewhere to the northwest let out a chorus of gobbles. Sanders shook his head, clearly tickled. Thunder pealed again. Again, the gobbles sounded, but that time with more

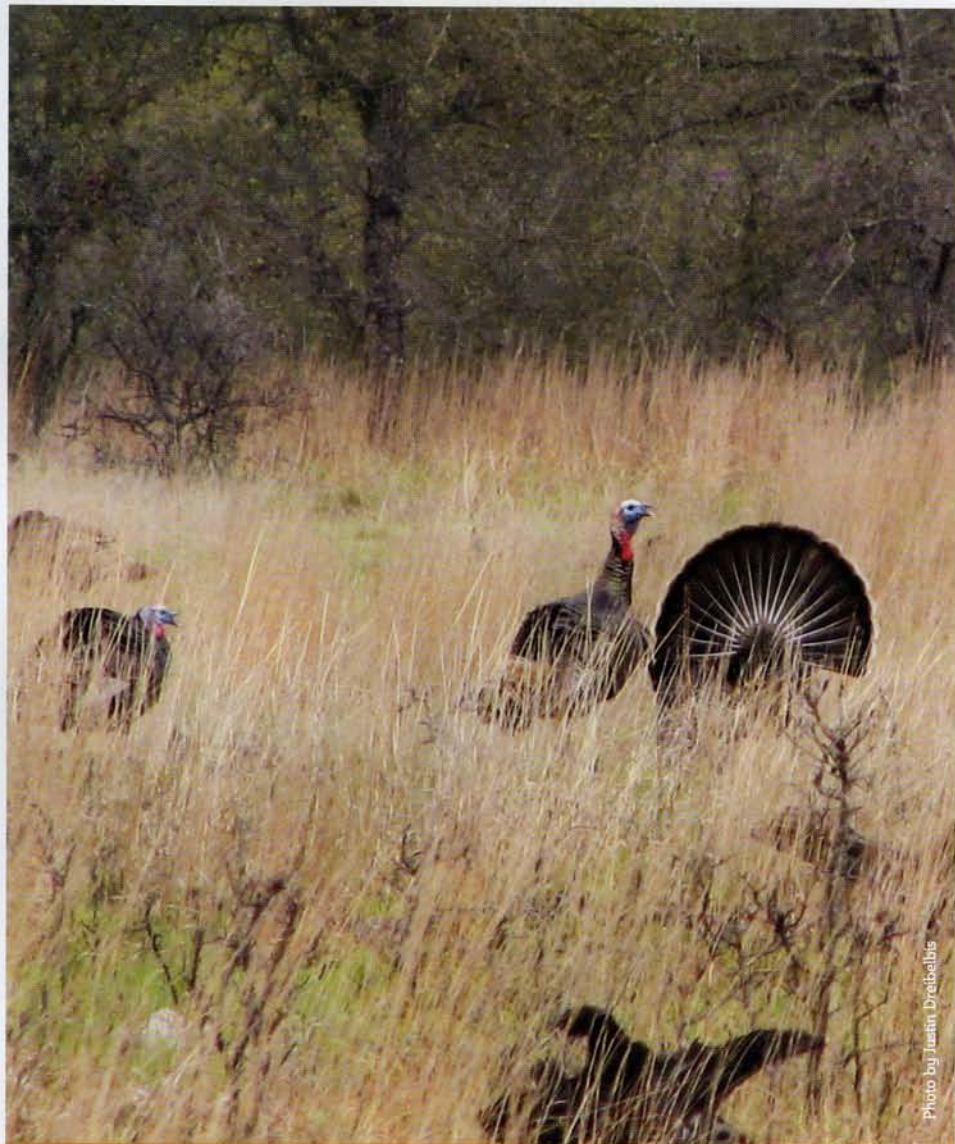


Photo by Justin Dreibeis

OPEN AREAS spread throughout the landscape provide important display areas for gobblers.





Photo by Jenny Sanders

A THREE WEEK old burn near San Diego Creek begins to green up, attracting insects that will be crucial for poult development.

relish. "When they get worked up like this, I could just yelp with my mouth, and y'all would think I was an expert turkey caller," Sanders grins.

Again the thunder, and again the echo of gobbles. "Those were the jakes." Sanders was chuckling. "Jakes will go on like a bunch of kids."

I chuckled, too, thoroughly enjoying this fowl-weather song, thinking to myself, "Watch out Johnny Cash, you've got yourself some serious competition." 🐔



Photo by Jeff Parken

A RIO GRANDE HEN and her poult search for food. Poults rely on insects for protein, which is important for their development.



# TEXAS WILDLIFE ASSOCIATION/L.A.N.D.S SUMMER TEACHER TRAINING

1st Date: June 20-22, 2011 Where: Dobbs Run Ranch, Rocksprings, TX  
2nd Date: August 1-3, 2011 Where: Camp Allen, Navasota, TX

### Who Should Attend:

- Teachers: 6th, 7th, and 8th grade – Science
- 9th and 10th – Agriculture, Biology, and Science
- Educational Volunteers: K-12

### Topics Covered:

- Wildlife in Scientific Inquiry and Lab Investigations
- Anatomy and Adaptations (Necropsy Demo)
- Niches and Food Webs
- Soils
- Plant Identification
- Wild about Technology (Radio Telemetry & GPS)
- Land Management Tools
- Habitat 101
- Classroom and Field Activities

### Cost: \$150 Per Person

Includes: Lodging, meals, class materials & activities

### What You Will Gain:

- 12 SBEC credit hours
- L.A.N.D.S. CD and Notebook
- Opportunities to "earn" field trips
- Ability to network with other educators
- Hands-on class and field activities
- Chances to WIN teaching aids & door prizes



### For More Information or To Register:

Contact Koy Coffer at (830) 792-3070 or [kcoffer@texas-wildlife.org](mailto:kcoffer@texas-wildlife.org),  
or Kassi Scheffer at (210) 826-2904 ext 113 or [kscheffer@texas-wildlife.org](mailto:kscheffer@texas-wildlife.org).