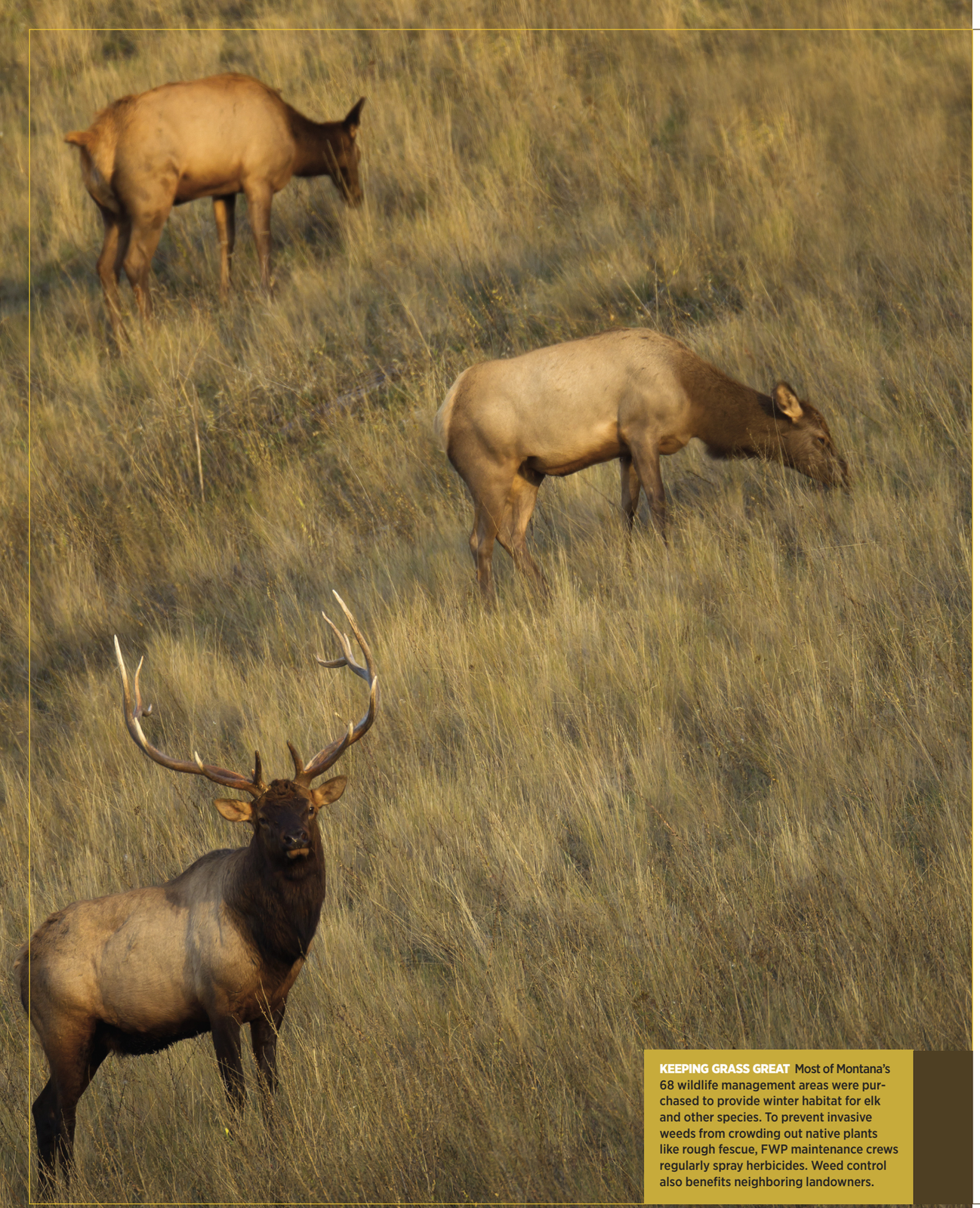

KEEPING GRASS GREAT Most of Montana's 68 wildlife management areas were purchased to provide winter habitat for elk and other species. To prevent invasive weeds from crowding out native plants like rough fescue, FWP maintenance crews regularly spray herbicides. Weed control also benefits neighboring landowners.

LEFT: TIM CHRISTIE; RIGHT: PAUL QUENEAU

Good Maintenance Makes Good Neighbors

FWP puts a high priority on controlling weeds, building fences, and managing timber on wildlife management areas across Montana. **By Paul Queneau**

Brady Shortman maneuvers his pickup up a rutted forest road as we make our way to a spotted knapweed infestation in the high country of the Spotted Dog Wildlife Management Area (WMA).

This 37,616-acre WMA between Avon and Deer Lodge is a waffle-iron of ridges and valleys covered in grassy savanna, bitterbrush, aspen, and conifers climbing toward the Continental Divide. In 2010 Montana Fish, Wildlife & Parks acquired the property, which contains the largest contiguous publicly owned native grassland in western Montana, to protect and improve habitat for the 183 species of wildlife that depend on it, including critical winter range for more than 2,000 elk.

But like many places in western Montana where, decades ago, overly aggressive logging and cattle grazing disturbed the soil, the property came with extensive patches of invasive weeds. As is often the case, they were mostly clustered along access roads. An initial survey when FWP purchased the property found that roughly 6 percent (2,000 acres) was infested with knapweed, houndstongue, and other noxious weeds.

PREPARING FOR BATTLE FWP maintenance worker Shawn Smith mixes an herbicide in a four-wheeler sprayer at Spotted Dog Wildlife Management Area, parts of which are covered in spotted knapweed.

Noxious weeds are non-native plants that crowd out native vegetation and generally aren't eaten by wildlife or livestock. Depending on the species, invasive weeds can also increase wildfire risk and erosion and even change soil chemistry.

They are detested by wildlife managers, ranchers, and farmers alike.

At Spotted Dog, wildlife managers believed they could greatly reduce the harmful vegetation. Though the work would likely take years, it would allow native species like rough fescue to recover.

Shortman is the maintenance supervisor for several major WMAs in western Montana. As he rounds a dusty hairpin, we spot Adam Sieges, a member of Shortman's crew, FWP's lead weed warrior, and the agency liaison on the Montana Weed

GIVING WEEDS THE BLUES
Regional WMA maintenance supervisor Brady Shortman (above left) and maintenance foreman Adam "Weed Warrior" Sieges spray knapweed beneath conifers. Left: Blue dye added to the herbicide lets applicators see where they missed. "You need to get it all," says Shortman. "Otherwise you have another year's worth of seeds in the ground and you're back where you started." Right: Dead thistles show the results of a previous herbicide application.

Control Association board.

Sieges's truck is loaded with a tank of herbicide hooked to a gasoline-powered pump and 100 feet of hose coiled on a vertical wheel for easy deployment. As I snap photos, Sieges sprays a roadside patch of knapweed until all of it is tinted blue. The dye helps him see if he missed a spot.

Down the road we inspect another patch of invasives sprayed several days earlier. The heads of knapweed, bull thistle, and mullein have curled over, indicating successful treatment. "We wait for just the right conditions to nail these things," Shortman says. "We can't do it if it's just rained—or if it's about to rain—because the herbicide won't take, so we watch the weather like hawks. And when we get our window, it's awfully satisfying to see the results. We've got some areas of invasives that we've treated two or three years in a row and seen them shrink by 75 percent."

That's good not only for a WMA's wildlife but also for its neighbors, who don't want invasives spreading to their property. "The key to weed management is early detection and control to prevent spread into noninfested areas on a WMA or next door," Shortman says. "That's especially true for new invaders like yellow toadflax and leafy spurge. When hunters report seeing those, we get the GPS coordinates and jump on it immediately so they don't get established like knapweed has."

WHIP IT GOOD

FWP has been buying tracts of critical elk and other wildlife habitat from willing sellers since the 1940s. Today, Montana's statewide system of 68 wildlife management areas (totaling 452,000 acres) secure some of the best game and nongame habitat and public access for hunting, wildlife watching, fishing, and other outdoor recreation.

From the beginning, WMAs were created in large part to help neighboring landowners. Most were purchased to provide winter habitat for Montana's growing number of elk while keeping the hungry animals off adjacent ranches. To further maintain

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ALL PHOTOS: PAUL QUENEAU EXCEPT SUN RIVER WMA FENCE PHOTO BY CRAIG & LIZ LARCOM

healthy relationships between the department and property owners next door, in 1999 the Montana Legislature and FWP created a "good neighbor" policy. These legal guidelines stipulate that the agency will maintain fences and signs around all boundaries, ensure access roads are maintained, and manage weeds and litter so they don't spread to nearby properties.

In similar fashion, the 2017 Legislature created the Montana Wildlife Habitat Improvement Program (WHIP). The program sets aside federal Pittman-Robertson (P-R) funds for large-scale wildlife habitat restoration by controlling noxious weeds across adjoining public and private properties. The legislation makes up to $2 million in P-R funds available each year and requires $1 in nonfederal matching funds for every $3 of federal funding. A WHIP advisory council reviews applications for grants from the program, which FWP administers.

One major WHIP grant, for nearly $800,000, went to manage weeds across a 200-square-mile landscape of the Fish Creek drainage roughly 50 miles northwest of Missoula. The area includes private property, federal lands, and 41,000 acres that FWP purchased in 2010 from Plum Creek Timber Company and designated as a WMA, a state park, and a fishing access site. The FWP property contains habitat for moose, elk, mule deer, and beavers, as well as bull trout and westslope cutthroat trout on the area's namesake creek. Unfortunately, with an extensive road network built to accommodate past logging, the land was also heavily infested with knapweed, St. John's wort, and other noxious weeds.

Over the past two years, FWP and other land managers have used the WHIP grant to attack infestations by spraying herbicides and siccing predatory weevils on knapweed. "I just spent the last two days releasing bugs," says Liz Bradley, FWP wildlife biologist in Missoula. "This weed control project has been a lot of work and has required a ton of planning, but already we can see we're really making a difference."

GOOD FENCES

Another way FWP acts neighborly is by maintaining perimeter fences on WMAs. For more than three decades, Mark Schlepp has led the WMA maintenance work along the Rocky Mountain Front and elsewhere in FWP's Region 4. Now headquartered at Freezout Lake WMA, Schlepp grew up farming and ranching near Windham, and spent time as a kid hunting in and around the nearby Judith River WMA. For half a century, he's seen firsthand that good fences indeed make good neighbors.

Each winter, elk by the hundreds or sometimes thousands move down from the Front's high country in search of grass exposed on the windswept foothills of the Judith River, Sun River, Beartooth, Ear Mountain, and other major WMAs. Elk don't recognize property boundaries and sometimes wander onto neighboring ranches, trampling fences along the way. Schlepp spends each spring and early summer making sure WMA boundary fences are upright and functioning, and that gates and temporary "lay down" fence segments are maintained and reconfigured so elk herds can move without causing damage.

"During my tenure here, we've probably replaced or rebuilt 90 percent of our perimeter fences in Region 4," he says of FWP's central region. A three-person crew continually works on 300 to 400 miles of fence in a routine not unlike painting San Francisco's Golden Gate Bridge; by the time they finish, they have to start all over again.

Schlepp say that even though perimeter fences benefit adjacent landowners, FWP pays for most construction and maintenance. Some fences cost hundreds of thousands of dollars to rebuild or replace. "We don't go to

SETTING BOUNDARIES FWP maintains fences around all or part of its WMAs to prevent cattle from adjacent properties from entering, and to indicate boundaries so hunters don't inadvertently trespass on neighboring land. Fences generally aren't needed where WMAs abut national forests.

COWS ARE SOMETIMES WELCOME On some WMAs, FWP partners with neighboring ranchers to allow rotational cattle grazing. When done correctly, grazing can remove old, dead vegetation and reinvigorate plant growth, benefiting cows as well as elk and other wildlife.

our neighbors and ask to split the cost. We take care of it. And that's huge when it comes to maintaining goodwill," he says.

Montanans' state taxes aren't tapped, either. Almost all of the money used to maintain WMAs comes out of the Habitat Montana Fund, mostly drawn from nonresident big game license sales. In other words, the money that deer and elk generate goes back to supporting some of their best habitats.

Launched in 1987, the Habitat Montana Fund allocates its dollars so that 80 percent is available for buying conservation easements or WMAs from willing landowners to protect habitat and provide public access. The other 20 percent is set aside for maintenance, with half paying for immediate needs and the rest invested in a trust. As that trust has grown over the years, it provides increasingly larger interest payments to ensure a predictable revenue stream for WMA upkeep. "We're proud to have developed a funding source that will be there forever to help maintain these properties," Ken McDonald, head of the FWP Wildlife Division, says.

Another WMA maintenance challenge is keeping interior roads accessible not only for hunters and FWP crews but for other recreationists and agencies that use the routes. At Spotted Dog, Shortman says crews recently finished grading a road up to Rocky Ridge. The high-elevation section is owned by the Montana Department of Natural Resources and leased to FWP, except for a small parcel containing towers leased to communications companies. "Their crews need decent roads so they can maintain those towers," Shortman says.

Shortman is also working with the U.S. Forest Service to find funding to improve an existing route that would allow firefighters easier access along the east side of the WMA so any possible fire wouldn't spread next door. "Again, it's work we're doing to be as good a neighbor as possible," he says.

LOGGING FOR WILDLIFE (AND LOCAL EMPLOYMENT)

Sometimes WMA maintenance pays dividends beyond strengthening neighborly relations. In 2015, FWP hired Jason Parke as the department's first and only forester. He's overseeing more than 30 forest management projects on WMAs and other department properties, including several prescribed timber harvests that improve wildlife habitat.

Some of the harvest projects are even "cash positive," meaning they generate more money through the sale of wood products than what it costs to do the logging.

But the priority for WMA timber harvest is wildlife, and it often involves cutting down smaller Douglas fir, lodgepole pine, and other conifers expanding across grasslands and shrublands so important for deer, moose, and other species.

Parke supervises the Elk Basin Restoration Project on the Blackfoot-Clearwater WMA south of Seeley Lake. The wildlife management area winters up to 1,000 elk that visit from the nearby Bob Marshall Wilderness. It offers superb forage, especially within scattered aspen stands and expansive rolling grasslands. Both the aspen and grasslands are being overrun in places by conifers, which crews have begun cutting. Parke says the value of the logs will help offset the costs of habitat improvement and fuels reduction, such as removing small trees with no commercial value from grasslands and aspen stands and piling and burning slash to remove fuel hazards.

One "good neighbor" component of WMA timber management is that it can

reduce the risk of wildfire on a WMA that might spread to nearby properties. Another comes from providing work for Montana timber companies. On one Blackfoot-Clearwater project, crews from Bull Creek Forestry thinned understory beneath centuries-old ponderosa pine and Douglas fir, and removed one million board feet of saleable timber. The project provided approximately 2,800 days of work for local loggers, truck drivers, and mill workers.

In addition to timber harvest, fence management, road improvements, and weed control, FWP also does work purely to benefit wildlife on WMAs. Crews conduct prescribed burns to reinvigorate grasslands, plant shelterbelts for winter cover, control water levels on ponds to improve aquatic habitat for waterfowl and shorebirds, and cost-share with nearby farmers to plant food plots. But the good-neighbor work is equally important to wildlife. "If we don't maintain good relations with the people living next to WMAs, it's tough to convince legislators that investing in additional wildlife property is a smart thing for us to do," McDonald says.

BOUNTIFUL BENEFITS Managed logging, like here on the Nevada Lake WMA near Helmville, can open up dense forest to sunlight, prevent encroaching conifers from overtaking grasslands, and reduce wildfire risk on the FWP lands and adjoining private parcels.

CLOCKWISE FROM TOP LEFT: PAUL QUENEAU; MONTANA FWP; PAUL QUENEAU

PURPLE PEST Spraying spotted knapweed at a fishing access site near Billings.

Neighborly parks and fishing access sites

FWP also works to be a good neighbor by managing invasive plants on state parks and fishing access sites. To keep weeds from spreading, FWP crews mow, pull, and dig some plants while using herbicides, biological control (weed-eating insects), and targeted livestock grazing on others.

Scott Harvey, statewide asset and facility manager for Montana's state parks, says he coordinates about 1,700 acres of noxious weed management each year. As on WMAs, spotted knapweed is Enemy No. 1 for state parks.

"For example, we've been working with the neighboring landowner at Lost Creek State Park who has a major knapweed infestation on his property that threatened the park's native plant communities," Harvey says. The landowner purchased and helped release 600 root-boring weevils on his property and the park perimeter. The Deer Lodge–Anaconda County Weed Control Department chipped in to help. "[The weevils] have definitely made a big dent in the knapweed along the property boundary, creating a weed-free buffer," Harvey says.