How will oil and gas development affect hunting and the outdoor experience?

The mention of a Wyoming pronghorn hunt conjures images of vast, sagebrush-covered, rolling hills that march uninterrupted to the base of a mountain range fifteen miles in the distance. A hunter can stand in one place, turn a complete circle, and see nothing but sage, dirt, grass, and sky. No other human presence is evident.

In much of Wyoming’s pronghorn and sage grouse country, that’s how it was only a few years ago. But in the Moxa Arch, Continental Divide Basin, Atlantic Rim area, Pinedale Anticline, and especially in the Jonah region, Biologists are just beginning to understand the impact of oil and gas development on wildlife. The impact of this development on hunters has yet to be investigated. (Gas field on the Atlantic Rim by Wendy Shattil & Bob Rozinski)
A centerfire rifle slug can carry three miles or more in open country. For that reason, a responsible hunter never shoots at big game without checking the background first. In a heavily developed oil and gas field, there may not be room to shoot safely. (Gas field near Pinedale by Wendy Shattil & Bob Rozinski)

that memory has been replaced by a new reality.

Now when a hunter turns that complete circle, instead of seeing untamed lands, what’s revealed is evidence of our nation’s hunger for fossil fuels. According to the U.S. Department of Energy, the United States consumed 20.66 million barrels of oil that came from beneath U.S. soil each day in 2005. But the domestic oil isn’t enough to slake our country’s thirst. We also burned 83.8 million barrels of foreign oil each day. That equals a little more than 104 million barrels of oil a day in 2005, for a grand total of nearly 38 billion barrels over the year.

At a population of about 295 million people in the United States in 2005, that means every man, woman, and child consumed just under 129 barrels of oil through the year, or almost fifteen gallons of oil a day. That might seem impossible, unless you consider that a forty-two gallon barrel of oil makes about nineteen gallons of gasoline. If all the oil were converted to gas, each U.S. citizen would have used 1.32 gallons of gas each day in 2005.
The nation also used just under 22 trillion cubic feet of natural gas last year. Wyoming’s share of the national natural gas production was roughly 2 trillion cubic feet in 2005.

That hunger is driving changes on the landscape. Out in Jonah Field, the Moxa Arch, the Continental Divide Basin, and many other areas, the effects are obvious. At every ten to twenty degrees of the compass, there’s an oil well, a gas pumping station, a compressor site, or a coal bed methane well. Running like strands of a spider’s web between these clanging, hissing, growling hunks of metal are roads that carve the landscape into digestible chunks.

Dave Gowdey, the executive director of the Wyoming Wildlife Federation, says the impact of oil and gas development has caused many of his organization’s members to cut their hunts short or not go at all.

“It was especially bad last fall,” he says. “The Bureau of Land Management approved seismic testing during the hunting season near LaBarge. There were trucks going everywhere, explosions, helicopters, you name it. The reaction from hunters was extraordinary, in that people called us and complained. That is unusual. But they were so concerned with what was going on, they wanted us to do something about it. It was also unusual in that people actually called off their hunts.”

Others, like Robb Hitchcock, president of the North American Pronghorn Foundation, have also felt the effects of mineral recovery.

He says there’s a great deal of disturbance where oil and gas development is going on. But he admits he doesn’t know how that disturbance affects pronghorns.

“I’m always amazed at what antelope can tolerate,” he says. “They can’t move into the city, so they just adapt to what’s going on around them.”

However, he also says he’s sure that adaptation isn’t easy for the animals. He says they’re obviously more stressed than they were when the country was free of oil and gas wells.

“Stressed animals use more resources just to survive,” he says. “A lot of areas will lose favor with hunters, because there won’t be as many record-book animals. I’ve already noticed a decline in trophy quality in the last fifteen years. It’s hard to quantify, though. I’m sure there are impacts that are hard to scientifically document.”

In his day job with the Burlington-Northern Railroad, Hitchcock has an opportunity to do some informal pronghorn scouting. In addition to those runs, he gets out on the ground and actively looks for animals and areas to return for during the hunting season. Because he spends so much time out on the prairie, he gets to see a lot of Wyoming, particularly that area west of Casper and east of Shoshoni. That region used to be open and empty,
he says, but in recent years, oil and gas wells have cropped up with increasing frequency.

“While I’m on the railroad and during scouting trips, I haven’t seen what I’ve seen before,” Hitchcock says. “There used to be at least two big bucks, and you had to decide which to go for when you went back out to hunt. Now you spend your scouting time just looking for an animal that catches your attention.”

“Nothing barring a revolutionary event is going to keep us from developing these gas fields,” says Walt Gasson, the Woming Game and Fish Department’s planning coordinator. “It’s hypocritical of me as a consumer to say we shouldn’t do this, and nothing I say will prevent it from happening. But there are opportunities for agencies and developers to work together. We have to make sure that a hundred years from now, maybe it will be as good as it was thirty years ago.”

The energy companies are taking steps in that direction. The new roads they scrape through the sagebrush aren’t as wide as the ones they dozed a decade ago. And instead of running another swath through the habitat, they’re putting the pipelines under the road’s crown. They’re reducing the sizes of the well pads. Some companies are even placing their wells on elevated platforms that leave less of a footprint on the land. When they finish pulling the minerals out of the ground, most of the companies are putting a lot of effort into reclaiming the land to a state as near what was there before the drilling as possible.

But there are still wells out in land that was once wild and open. There are more roads than there were less than a decade ago. More vehicles travel those roads every day. Not just the energy company employees, but also more hunters, sightseers, and other land users. Country that not long ago was impossible to access without the investment of a lot of sweat and shoe or saddle leather is now an hour’s drive away in an SUV.

Tim Woolley, the Game and Fish Department’s biologist in the Baggs area, says the roads are the component of energy development with the most impact.

“The wells have about a two-and-a-half-acre impact,” he says. “But the roads not only take away from the habitat, they also allow more access.”

Keith Dana’s income comes from the oil and gas production companies, but he agrees that access is a problem that comes with mineral development.

“The antelope just can’t get away anymore,” he says. “You see a buck, and you can find a two-track or a road. You get on your four-wheeler and drive right up to where you can get a shot. That’s my biggest gripe—the access we provide.”

Dana says on private land, the access isn’t as much of an issue. Producers who pull oil and gas from the ground on private land can lock gates to keep the general public out. But on lands administered by the Bureau of Land Management, roads used by oil and gas producers must be available to the public, as well.

“The BLM won’t let us shut down access,” Dana says. “So every new road means more access for more people.”

Hunters who have returned to the area south of the Red Desert for decades are now turning their backs on that land. Bob Sexton has hunted the area south of Bitter Creek and around Adobe Town for as long as he cares to remember. But his days of hunting that country may be over.

“I went out there last year, and I was really discouraged,” he says. “When I first started hunting out there, if you got very far off the interstate or the Baggs/Creston Blue Gap road, you didn’t see anybody. But there just isn’t anywhere out there for the deer and antelope to hide anymore. The roads have really been improved, and a hunter can go anywhere.”

For hunters, Woolley says the result of that increased access will be more restrictive regulations. In regions like pronghorn hunt areas fifty-seven and fifty-eight, the harvest percentages were historically lower than they have...
been since the new roads were built. Now ninety to ninety-five percent of the hunters are successful, so the number of licenses issued for those areas will have to be reduced.

“It amounts to a loss of opportunity,” Woolley says.

The additional traffic itself may be affecting the wildlife that lives there. Again, many energy companies have shown they care about the land and its natural inhabitants. Some of those producers have already funded a mule deer study in the Jonah area, and several more companies are planning another study of the sage grouse and pronghorn in the Wamsutter/Creston Blue Gap gas field.

Echoing a point Dana makes, Sexton says the increased access affects more than just the aesthetics of a hunt. Both men say the roads and the disturbance they bring with them have an impact on the wildlife itself.

“I don’t know as you can lay all of our problems on the drilling,” Sexton says. “We’ve had a long stretch of drought, and there may be other fac-
tors for the decline of the herds. But I don’t think it’s very likely that the antelope and deer populations will ever come back, because of the drilling and the roads out there.”

The leaders of the Wyoming Game and Fish Department want to make it clear that they aren’t against energy development.

“We just want to make sure it’s done with the least impact to wildlife and the outdoor recreation wildlife supports,” says Terry Cleveland, Game and Fish director.

A multi-year study being conducted in the Upper Green River Valley by Hall Sawyer and Western EcoSystems Technology, Inc., is funded primarily by Questar, an energy production company currently working in Jonah Field. The study involves tracking mule deer with collars fitted with global positioning system receivers. The first year of the study showed that deer were less likely to use areas where oil and gas production was under way. In fact, the deer altered their traditional migration routes to stay 1.7 miles away from the nearest well pad. In the second year, that distance increased to 1.9 miles, and in the third, it increased again to 2.3 miles.

The study reveals two important points. In general terms, it means the deer will try to stay clear of areas with development and human activity. That brings up the question of survival in the winter.

Oil and gas development is currently going on in some areas that serve as migration routes for deer and other big game animals as they make their way to winter range. Sawyer’s research suggests that these animals may go around that development, rather than traveling their traditional routes, which might have had better forage than the new path. Animals that are already physically stressed by the effects of winter may be more susceptible to starvation or predation, but they will be forced to take a longer route through areas with less access to nutrition. Some animals may be pushed out of the region by energy development, and others may not survive through the winter. Hunting opportunities are based on the numbers of animals in specific hunting areas, and fewer animals equates to fewer hunting opportunities.

And if hunters aren’t happy with the 2,200 wells currently working in the Creston/Blue Gap gas field, they’re certainly not going to be pleased with the 9,900 additional wells planned for the area. Or the 39,000 more planned for the Powder River area, where there are currently 34,000 wells producing oil, gas or coal bed methane. The Pinedale Anticline and Jonah Field have 600 wells each, with 430 and 3,000 more on the horizon, respectively. Moxa Arch has 4,300 wells with another 1,800 permitted, and the Atlantic Rim area has 200. There are 2,500 wells in production in the Wind River area, but there are no new permits issued for the region.

The fact is that oil and gas production is here to stay. Unless, as Gasson says, there is a major development that makes the need for oil and gas decline dramatically, the wells, compressor stations, pipelines and roads will be a part of Wyoming’s landscape until all the reserves are gone.