

# FOR ANDREW HANSEN FROM WILBUR WOOD

The Billings Outpost

THE ENVIRONMENT

## Can grizzlies, restaurants share Yellowstone

By WILBUR WOOD  
For The Outpost

When Andrew Hansen first came to Bozeman - where he is an ecology professor at Montana State University - he lived out of town.

"I didn't even know what those pretty yellow flowers were," he said. He soon learned that they were leafy spurge, a plant that arrived from Eurasia more than a century ago, brought in as an ornamental, but with no natural predators to keep it in check, it is now designated a noxious weed.

"Weeds that don't stay put" are just one of the problems that accompany the proliferation of rural subdivisions in the Greater Yellowstone Ecosystem. Hansen - who now lives not in Bozeman's exurbs but in the town itself - was at Rocky Mountain College on Wednesday, April 18, to talk about land use changes and human population pressures in what he calls "the largest intact ecosystem in the Lower 48 states."

At a lecture in Fortin Auditorium, Hansen related the history of this ecosystem from 1860 to the present, showing maps of a somewhat arbitrarily defined area around Yellowstone National Park that includes "gateway communities" such as Rexford, Idaho, or Cody, Wyo., or Gardiner; the upstream portions of rivers flowing off the Yellowstone Plateau are part of this ecosystem, and certain cities are either within or at the edge of it.

Bozeman is one of those cities. Billings is not. When asked by Walter Gulick, a retired professor of philosophy at MSU Billings, about such distinctions, Hansen replied that the map boundaries are not just defined ecologically but also involve economics. The park certainly has a significant effect on the economy of Billings, he acknowledged, but Billings has a lot of other things going on - it's a large agricultural and energy processing center full of "big box" stores - so while Yellowstone Park may account for something like 5 percent of its economy, in Bozeman's economy the park and the National Forests around it may account for as much as 50 percent.

### Mingling ecology and economy

Hansen's presentation mingled ecology and economy, science and philoso-

phy, history and possible futures for the Greater Yellowstone Ecosystem - let's call it the GYE. The human population in the GYE is now at 420,000 and is projected to rise as high as 800,000 within a few decades.

Most of this population growth has occurred since 1970, and the major reason is that people from other places - usually urban suburban places - are attracted to "natural amenities," to the fact that they can hike, camp, boat on rivers, hunt elk, fish for trout, see grizzlies.

The problem is that newcomers often impair these natural assets simply by living as they did in suburbs or cities. Weeds travel down roads or are carried more widely by the kinds of animals - pets, certain opportunist avian species like cowbirds - that accompany people. Septic tanks leak and pollute groundwater.

Irrigated agriculture, as well as the watering of lawns, changes the greening up and drying out patterns of natural vegetation, and this alters the grazing patterns of wild ungulate species like elk or deer attracted by the availability of food. These herds tend to cluster on private property where human hunters often are excluded, as are other large predators like wolves, cougars and bears. Eighty-five percent of grizzly bear mortality in the GYE, Hansen said, occurs on private land.

This leaves the territory to "meso-carnivores" like raccoons, possums or coyotes, which cannot thin the herds, which leads to overpopulation, more disease, and "less meat in the freezer."

The desire to be close to nature means that many new houses are built in forests or along rivers. Protecting these structures from fire or flood alters the natural regime: Fires destroy but also renew forests; floods destroy but also replenish flood plains with nutrients and enhance ecological diversity.

### Lured here by nature

Hansen's personal solution was to move into town. Most weekends, how-

ever, he's out enjoying those "natural amenities" - the mountains, the rivers - that lured him here. And, he says, people will continue to be lured here.

The question is, how can we "sustain wildlife ecosystems and thrive at the same time?"

How can we have grizzly bears and also go to a great local restaurant?

"Do we want to keep the population of our town at a level where Big Box stores do not come in, and where local small businesses can prosper?"

- Andrew Hansen  
ecology professor

One-third of the lands on Hansen's maps of the GYE are privately owned, but only one third of those private lands are "developed" either into rural housing or intensive agriculture. This means that just 11 percent of the GYE falls into that "developed" category. Keeping that percentage low means "concentrating population" in existing populated areas - limiting "sprawl."

It also means educating dwellers in existing exurbs - or future ones - to diminish unintended negative human impacts.

Are there any hopeful signs that this can occur? David Strong asked this question. Strong is a philosophy professor at Rocky Mountain College who organized a series of environmental lectures this spring (Hansen's was the final one), and he offered one example of hope: "low impact" camping (leaving no trash in the back country) now seems to have become the norm.

Hansen replied that, fortunately, there are many hopeful signs.

"Conservation easements have had a massive positive impact," he said. Ted Turner is one of those outsiders buying land here because of its natural attractions, but Turner's Flying D ranch is also "125,000 acres that are probably the most productive in the entire Yellowstone ecosystem."

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Open space bonds, Hansen said, have worked in many places: Local governments can use tax money to buy up farms and preserve open space.

## How big do we want to be?

“And why not discuss, as a community, how big we want to be?” Hansen asked. “Do we want to keep the population of our town at a level where Big Box stores do not come in, and where local small businesses can prosper?” If the answer turns out to be yes, then “what incentives could we create to achieve this?”

As for educating people who live here, Hansen referred to Big Sky, the high-end resort up the Gallatin River south of Bozeman, which “epitomizes the wrong kind of development.” Yet he’s given talks at Big Sky and has encountered many residents who are concerned about issues ranging from water quality to birds. (There apparently are lots of bird feeders at Big Sky Resort.)

“As soon as people learn about the impacts of their activities,” Hansen said, “as soon as they know that this pretty yellow flower is a weed, they can begin to change.”

Although he wondered how many grizzlies could survive with 800,000 people in the GYE, Hansen believes that with appropriate education and public policies the region could sustain its beauty and integrity with almost double its current population.

However, he sees an upper limit. If the population in the Greater Yellowstone Ecosystem ever reaches 2 million to 3 million, he said, shaking his head, it’s all over.

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