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Grappling with growth : A case study in the northern Black Hills of South Dakota

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The University of Montana

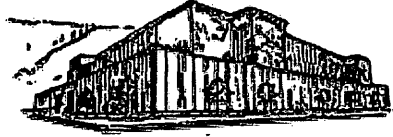
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Grappling with Growth: A case study

in the Northern Black Hills of South Dakota

by

Ronald H. Tschida

B.A. University of Minnesota, Morris, 1982

presented in partial fulfillment of the requirements


for the degree of

Master of Arts

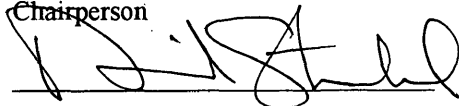
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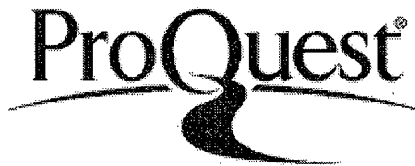


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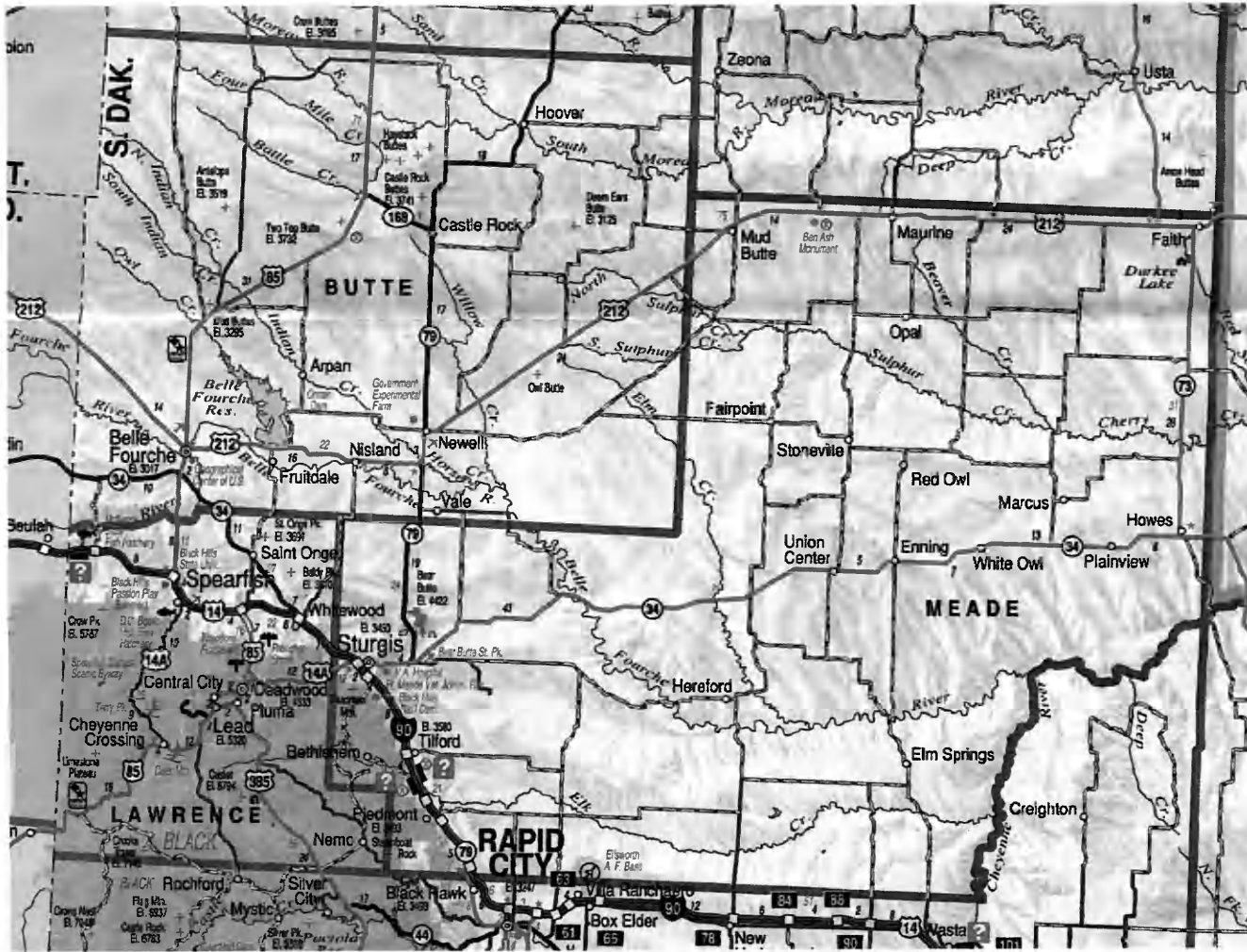
Introduction

Most of the reporting for this series, which deals with growth issues in the Northern Black Hills of South Dakota, was done in a nine-month period from late 1998 to mid-1999. The project was then shelved for a time when I changed jobs and left the Spearfish area.

One unanticipated bonus of the delay was the opportunity to see longer-term trends -- to see the results of some of the work on which I was reporting. To complete the project, I checked back in 2002 with some of the key sources I'd interviewed earlier and wrote a short epilogue updating the series. With the exception of the epilogue, all the stories were written as if to be published in summer 1999, when my notes were current and I had written much of the first draft.

In the daily newspaper business, we're usually reporting on "work in progress." And what looks like an important turning point may turn out later to have been a minor, perhaps even irrelevant, step. For example, adoption of Lawrence County's new comprehensive plan in December 1998, after a hard-fought, two-year effort, seemed a major step forward. The plan emphasized preservation of agriculture land, conservation of resources, orderly growth. More than two years later, the county still has not approved the zoning and subdivision ordinances that would back the plan.

The stories here are designed as a short newspaper series in which stories would be packaged to run over two or three days. For example, "Northern Hills residents grapple with growth" could be packaged with "Incoming residents pack jobs with them" and the short profiles on the Gibson and Johnson families. The remaining stories could follow the next day or two.



Source: State of South Dakota Highway Map

Butte, Lawrence and Meade counties lie on the western edge of South Dakota bordering Montana and Wyoming.

Northern Hills residents grapple with growth

In September 1997 a contractor fired up his Caterpillar, dropped its massive blade into the red clay at the foot of Lookout Mountain and began carving a road up the slopes of the prominent peak on the northeast shoulder of South Dakota's Black Hills. When he was done, in a surprisingly quick few days, the switchbacks topped the sandstone crest and opened the mountain to what area residents soon learned was a plan for a sprawling subdivision of upscale homes.

Spearfish, a city of about 7,000 people, lies just west across Interstate 90 from the mountain, and residents for decades have considered Lookout their back yard. Watching evening light play across the red shale and yellow sandstone is part of summer life. But now the zigzag road looked, from the town below, as if some giant Zorro had slashed his mark on the mountain.

And it galvanized concerns about growth here, the changes it brings and the choices to be made.

"Everyone that's been brought up around here has so much respect for that mountain," said long-time resident Dick Termes at one of the many public hearings that followed. "Lookout Mountain is what Spearfish is all about. There's just no question we've got to protect it."

The Northern Hills area of Lawrence, Meade and Butte counties is seeing population growth. On that, at least, most people agree. Just how fast that growth is

occurring, what its impact might be and how it should be managed are tougher questions.

Some see the region as the next domino to fall to the growth and sprawl that has rippled up the spine of the Rocky Mountains and cascaded into many once-quiet backwaters of the West.

In that scenario, open space will be carved into exclusive subdivisions and ranchettes, as is happening in places such as the Bitterroot Valley of western Montana. Demand for land will push prices to a point where agriculture is impractical if not impossible and the open, rural character that drew people to the area in the first place will be lost.

Others contend that the Black Hills region is too isolated to draw sustained, rapid growth. They worry the area could easily slip the direction of other Northern Plains communities that are losing population, drying up and disappearing. Locals, in this view, will have to work on economic development in order for growth to continue at a moderate and healthy pace.

Wild cards in the prediction deck include the possibility of higher-stakes -- perhaps unlimited-stakes -- gambling in historic Deadwood; the potential of fiberoptic technology to bring high-tech businesses to the Northern Hills; and the potential of the planned Heartland Expressway to spur development by linking the Black Hills to Denver. This series takes a look at some of the questions surrounding ongoing changes in the Northern Hills, including:

- ◆ Just how many people are moving in?

- ◆ What are the impacts of population growth?
- ◆ Why are more people choosing to live here now?
- ◆ What are residents doing to plan for and manage the changes?

These are questions faced by many communities across the country.

In Minnesota, which perennially makes the list of "most livable states," the seven-county metro area including Minneapolis and St. Paul is seeing farmland-gobbling sprawl and skyrocketing real estate prices. Denver, Colo., a boom town for much of the 1990s, is struggling to digest rapid growth.

But many smaller communities, too, are seeing rapid growth. The business publication *Demographics Journal* reported that 53.2 million Americans lived outside of metropolitan areas in 1995. That's an increase of 5 percent since 1990. Small population centers such as Bend, Ore., and Bozeman, Mont., are seeing population gains of two- to four times the national average.

The common denominator in these places is a perceived quality of life that includes small-town values and easy access to outdoor recreation.

The Northern Hills region, with its Black Hills National Forest and vast open space prairie, is apparently drawing its share.

Rural areas drawing most people

It is already clear that the area is not immune to sprawl. Residential development in the Northern Hills is more often taking place in rural areas than in incorporated cities.

That brings corresponding strains on services such as police and fire protection, roads, and sewer and water systems.

Government control is odious to many residents in this conservative region, as it is in other parts of the West. But increasingly, people worry that without some planning and control they'll lose the things they like about living in the Northern Hills.

In December 1998, Lawrence County adopted a new comprehensive plan to guide growth, the first update of its plan since 1975.

Meade County recently adopted its first comprehensive plan and, after a series of contentious hearings in mid-1998, updated its subdivision ordinance. The county still has no zoning ordinance.

Butte County, which stretches from the edge of the Black Hills north and east into the rolling plains, has almost no regulation on development. Unlike Lawrence and Meade counties, which have embraced tourism, Butte County clings to its Old West heritage. Spearfish in Lawrence County is home to the "Passion Play," one of the most famous of Black Hills tourist draws, and the county seat town of Deadwood has refurbished its historic district into a \$5-stakes gambling district. Sturgis, which with about 5,300 people is the biggest town in Meade County, draws 250,000 people to its annual Harley Davidson bike rally.

Butte's county seat of Belle Fourche was once a regional railhead for cattle and sheep ranchers and ranching is still a mainstay in the county. Residents in the county, where neighbors are sometimes miles away, are independent and conservative.

Butte County does not have a comprehensive plan, zoning ordinance or permanent subdivision ordinance. The county adopted temporary subdivision controls in December 1997, and is currently considering temporary zoning controls.

Meanwhile, developers increasingly are facing a "just say no" attitude from the public.

"I'm anti-development," one resident said bluntly at a subdivision hearing in August. "This (subdivision) will damage land values in Lawrence County by destroying the view."

Lawrence County planning and zoning administrator Erik Birk notes that his job is becoming increasingly litigious. Almost every subdivision applicant brings an attorney to public hearings, opposing groups frequently have their own attorneys, and the threat of a lawsuit hangs unspoken in the air over every discussion.

At a typical Lawrence County public hearing recently, the landowner/developer didn't say a word, referring all questions to his attorney, and the planning commission twice went into closed session to consult with the county's attorneys.

Birk in fact is so tired of controversy that he'll speak to a reporter only in the most careful tones, seldom offering a personal observation or straying from reference to written ordinances and policies. In an interview, his head bobs nervously when he sees the reporter's pen move.

"Now don't get me in trouble," he admonishes.

Growth has slowed

In the early 1990s, Deadwood, where Wild Bill Hickok died holding aces and eights, sought to capitalize on its Old West gambling heritage. Voters in the one-time mining boom town approved legalized gambling and the new industry fueled a short period of intense growth not only in Deadwood but most of the Northern Hills. Coincidentally, Kevin Costner filmed much of "Dances with Wolves" in the area about the same time, generating more publicity for the region. Costner himself bought land overlooking Deadwood, vowing to build a first-class resort on the site. However, by 1995 the growth rate had slowed. Costner's land still holds Ponderosa pines, not casinos.

According to U.S. Census estimates, Lawrence County's population grew by 8.7 percent from 1990 to 1995, to 22,452. In the same period, Meade County gained 5.5 percent, reaching a population of 23,084. Butte County, which added the fewest new residents -- 982 -- but also had the smallest population to begin with, had an estimated population gain of 12.4 percent in the five-year period to reach an estimated population of 8,896.

That compares to a state-wide growth of 4.7 percent and a national population growth of 5.6 percent from 1990 to 1995. So while two of the three counties exceeded national averages, they hardly set a breakneck pace, especially compared to the likes of Douglas County, Colo., which with its 12.9 percent growth in 1996 alone was the fastest growing county in the nation, according to the Census Bureau.

"It's considerably more moderate than everybody thought," said Darlene Piekola, Lawrence County director of equalization.

Indeed, the *perception* is that growth is much faster than census figures indicate. That may be because the changes are just so noticeable, with stunning homes being built in stunning locations, perched on elevations or tucked into wooded lots and pastures where locals used to hunt and hike.

The Northern Hills may have not so much a problem with rapid growth as with sprawl.

The fastest-growing areas, planners say, include the rural Black Hawk and Piedmont areas of Meade County, Boulder Canyon in Lawrence County and outlying subdivisions in Butte County.

Even small projects, such as a plan to put 39 new homes in Maitland Canyon, dismay current residents. Neighbors packed public hearings to complain about the extra traffic the subdivision would bring to the narrow, gravel canyon road and the threat of ground water contamination from more septic systems. The subdivision, however, was approved.

The Northern Hills is beginning to attract some big players in the real estate market as well. A Colorado real estate company in 1998 bought the historic Frawley Ranch, a 5,000-acre slice of the Centennial Valley east of Spearfish that's home to several sites listed on the National Register of Historic Places. Its plans for a championship golf course, hotel, campground, a shopping mall and more than 400 homes immediately drew strong protests from neighbors.

"What you have here looks like a mini-city," neighboring rancher Reed Richards said at a planning board hearing.

The plan calls for about half the ranch to remain as open space, but that's not enough to mollify neighboring ranchers, who say the project will lower water tables and threaten irrigation supplies. Other Lawrence County residents worry the county doesn't have enough money to handle the service demand of such a project, including law enforcement and fire protection.

The Frawley Ranch project has fueled talk about wealthy non-residents driving up local real estate prices. Locals repeat the adage: Sell your home in California or Colorado, buy a county in South Dakota.

Peikkola, too, has heard the persistent talk about a torrent of people moving in from California or Colorado.

So Peikkola, as part of a study on property taxes and valuation, looked at every "arms-length" transaction over a 2 ½ year period. The results of her study indicate the torrent may be more of a small stream.

An arms-length transaction is one in which a property is sold in a competitive, open market, between a willing buyer and a willing seller. This definition normally excludes, for example, family transfers in which the sale price might not be the same as what others would be willing to pay.

Of 1,151 such transactions in Lawrence County between Jan. 1, 1996, and July 31, 1998, Peikkola found that only 171 buyers, about 15 percent, were from out of state.

Another 14 percent of buyers came from outside Lawrence County but within South Dakota.

"The people within the county are just moving up," Piekkola said. "The majority of the sales are just that."

Real estate agents say Piekkola's study doesn't account for buyers who move first to rentals in the area while they decide exactly where they want to buy or build. That's common practice for well-off purchasers, agents say.

"(Piekkola's) figures kind of surprise me," said Ardis Golay, a Spearfish real estate agent who works with many upscale, nonresident buyers. "I would have thought it would be more than 15 percent."

Although Census numbers and county records show a fairly moderate growth rate, each new subdivision engenders intense debate.

Many residents complain that sprawling development is destroying the region's rural character.

In late 1997, Lawrence County commissioners on a 3-2 vote enacted a six-month moratorium on land use, or zoning, changes. The majority argued the moratorium was needed to slow down growth until a new county master plan could be completed, and to prevent a flood of applications by developers who might try to get in under old rules. Commissioners opposed to the move said it would do little good while creating hard feelings and the perception that Lawrence County is anti-business.

And not everyone is convinced growth is a bad thing.

A group calling itself Citizens for Orderly Growth, a coalition of real estate agents, builders, business owners and land owners, formed in November 1997 to fight to rescind the moratorium.

"COG," as the group refers to itself, isn't worried that growth is coming too fast but that all the talk about problems will strangle what is already a fragile local economy.

Low gold prices have put Homestake Gold Mine, the country's oldest continually operating gold mine and one of the area's biggest employers, on the ropes. Legalized gambling has brought low-paying service jobs to Deadwood and helped restore its historic downtown, but hasn't provided the widespread economic boom many had hoped for.

Mark Young, a property owner who's refurbished several historic buildings in Spearfish into boutique businesses such as a brew pub and a coffee house, helped found COG.

Propelled by his activism in property rights issues, Young in 1998 easily won a state House seat as a Republican representing Lawrence County, indicating that the vocal anti-growth segment hasn't won the day.

Birk, who previously worked in the Denver area -- which was recently named by the Sierra Club as the sixth-worst metropolitan area in the country for urban sprawl -- isn't surprised by the intensity of the argument in this much smaller community.

Slow growth in a small population area can have a greater impact than a similar rate of growth in a large urban area, Birk said.

"If you have 10,000 people and 120 people move in, it can have a fairly (significant) effect," Birk said. "In an area with 100,000 people, 1,200 people moving in may not have much of an impact."

Incoming residents pack jobs with them

It's a trend strong enough to have created its own vernacular -- terms such as "lone eagles," young grays" and "telecommuters."

People are fleeing the frenetic pace, congestion and crime of metropolitan areas in search of a peaceful lifestyle in particularly scenic rural areas. The West has become a magnet for such people and the Northern Hills region is drawing its share.

"These people, lots of times, are looking for a change of pace," said Spearfish real estate agent Ardis Golay. "They come from more populated areas. They don't want a lot of traffic. They don't want close neighbors."

Bob Golay, who also sells real estate, said many of the newcomers aren't looking for community connections.

"They want three acres, with the trees around them, where they can go out on their deck and they don't have to talk to anybody," Bob Golay said.

In the Northern Hills, people buying or building homes in the newer, outlying subdivisions frequently are bringing their jobs with them rather than depending on the local economy for a living.

Don Aaker, who as manager of Jobs Services in Spearfish keeps an eye on employment trends, offers a few definitions.

"Lone eagles" are self-employed, home-based and selling their service out to the area. Often, they are consultants; they may own a business in another state that they manage from their homes here.

"Young grays" are early retirees. Often, they've sold a business, farm or ranch. They've done well enough to move to a place of their choosing, and many are choosing the Black Hills.

"Telecommuters" use the phone and a modem to "commute" to work. Their jobs allow them to live where they choose, and they often choose to escape major metropolitan areas.

If one were to create a profile of property needs of these buyers, real estate agents say, privacy would certainly rank near the top. They want space -- acreage -- and a view.

That's a recipe for sprawl, of course.

The fastest-growing areas in Meade County are rural tracts near the tiny, unincorporated communities of Piedmont and Black Hawk, scenic areas where buyers can get a few acres, a view and privacy minutes from the interstate. And in Lawrence County, growth in unincorporated areas may be three times that of incorporated municipalities, according to planning office records.

The draft "Existing Conditions Report" completed as part of a new Lawrence County Comprehensive Plan, notes that the county already has nearly 1,500 approved

home lots in 87 rural subdivisions, enough to handle projected population growth to the year 2020.

But as one Realtor asks rhetorically, "Are they in the right place?"

Given the pace of new subdivision applications -- 19 Lawrence County plats were approved in 1997, 44 in 1996 -- the apparent answer is, no.

Golay works with many nonresident buyers and her impression is they form a significant and growing segment of the market.

Such buyers demand "view lots" in subdivisions with some amenities.

"I think in your Mountain Plains area, you're going to find more people who've moved into this area," Golay said referring to a large-lot subdivision, with private, paved roads, on the forested slopes just south of Spearfish.

Of course, not all new residents fit neatly into such categories as lone eagles and young grays. But the trend is worth noticing because it says some things about the local economy, Aaker said.

Because this is not the first time this region has witnessed rapid change.

Lead and Deadwood started as gold-rush boom towns more than a century ago. Other towns sprang up to provide timber, food and supplies.

Spearfish, with its rich valley soil, became the garden of the Northern Hills.

Belle Fourche was once a regional cattle shipping and sheep-shearing headquarters. Ranchers drove, and in later years hauled, cattle and sheep from Wyoming, Montana and South Dakota to the acres of sprawling stock yards. And Belle Fourche became the retail center of the region, its downtown lined with every

major department store. Many of those grand, stone-fronted Main Street buildings are empty today.

Today, people aren't coming to this region to fill jobs in some booming new industry. Newcomers -- those who aren't already retired -- are bringing their incomes with them. And they're working in isolation, rather than building businesses and creating more jobs for the community.

The growth in jobs in the Northern Hills is in the service industries, and those jobs don't pay enough to lure people to the area, Aaker said. In fact, the hospitality and tourist industries, which draw heavily on young, entry-level workers, have problems with labor shortages, Aaker said.

'Telecommute' opens choices

It was the park that sealed the deal.

Mike and Kelly Gibson had been not just house-shopping but town-shopping, searching for that just-right place to raise a family and Spearfish looked pretty good: small town atmosphere, historic downtown, plenty of outdoor recreation in the nearby Black Hills National Forest.

They took their 1-year-old son to prosaically named City Park, where crystalline Spearfish Creek slides by limestone cliffs and huge old maples offer pleasant shade. And where volunteers in the town of just 7,000 people had built a sprawling kids'

playland of jungle gyms, swings, slides and timber play houses -- all enclosed in a wood fence to make it easier for parents to keep track of kids.

"That park had a lot to do with (our move)," Kelly said. "For a community this size to build something like that says a lot about the priorities of the community."

Kelly "telecommutes" to her job as program director for American Indian Relief Council, spending most of each work day on the phone and computer. Given her job, the Gibsons could live almost anywhere in the country. They chose Spearfish and bought a home in the Green Acres subdivision at the east edge of town.

They moved here from Portland, Ore., a city that itself enjoys a great reputation for livability, with miles of bike paths, an hour's drive to the beach and an hour's drive to the mountains.

And Portland had other advantages, including excellent medical care, a thriving arts community and good restaurants. But increasingly, the Gibsons found Portland just too crowded.

Mike, a computer engineer, saw his daily commute stretch to an hour each way -- on a good day.

"That drive in traffic just drove me nuts," Mike said.

So many people took advantage of the recreational opportunities that hiking trails seemed as clogged as the freeways.

And Portland was changing fast.

"It was like I'd go up to a trail and if I'd come back the next week, there'd be a house there," Mike said.

When Joseph was born, the Gibsons began talking about the kind of town in which they'd like to raise their son.

The Gibsons, in their early 30s and married for 11 years, have been a couple since their college days in Laramie, Wyo. After Mike did a stint in the Army, they moved to Rapid City, where Mike got an electrical engineering degree from the South Dakota School of Mines & Technology. They also spent a lot of time exploring the Black Hills.

Then, he and Kelly moved to Portland where jobs in his field were plentiful and the pay was great. That was a career decision, and they stayed four years.

This time, Kelly said, being close to family was a big factor in deciding where to live. With both sets of grandparents in Sheridan, Wyo., Joseph will get a chance to get to know them as more than just visitors.

"We moved for jobs (before) and just found out that lifestyle was more important," Kelly said. Now Mike is a stay-at-home dad and Kelly works in an upstairs office at home.

So far, they're enjoying the change of pace and the small-town values. When Mike's car broke down on a recent outing in the Hills, the first person to come by stopped to help. That wouldn't have happened near Portland, Mike said.

"And if somebody does pull over, you better run for your life," he added.

The Gibsons have heard the talk about the growing popularity of the Northern Hills, but having seen the tremendous growth in Portland they are not greatly concerned about change here, which seems mild in comparison.

"This place could grow some and still be a comfortable place," Kelly said. "This can be a well-planned community."

Young retirees come home to the Hills

Dan and Sherry Johnson are typical of many new residents of the Northern Hills in that they have deep roots in the area. In a sense, their move to Spearfish was a homecoming.

Echoing comments made by others who have decided to move here, the Johnsons said a more peaceful lifestyle and the recreation opportunities of the Black Hills were important reasons for their return.

Dan was able to retire young -- he and his wife are 48 years old -- after 27 years with Peter Kiewit and Sons, an employee-owned construction company. The job took them to Wyoming and then Texas, where they spent the past five years. They didn't enjoy the Texas pace of life.

"The whole state was high-speed," said Dan, as he described a culture where it seemed everyone lived as if there were no tomorrow.

Both graduated from high school in Rapid City, where Sherry's parents still live. In 1996, when the Johnsons were considering retirement, they had one overriding concern.

Sherry's parents both have health problems, and the Johnsons wanted to be close enough to help care for her parents if needed.

Still, that leaves a pretty big area to choose from. After considering several Black Hills communities, including Custer in the Southern Hills, the Johnson's decided Spearfish was the best fit.

With five children, now ages 11 to 19, schools were a consideration. They figured that while Rapid City might offer more options, it was more important to raise the kids in a small town.

They heard good things about Spearfish public schools and the presence of Black Hills State University was an added attraction. Their oldest child, son Tanner, started at BHSU last fall.

"We wanted wide open spaces," Sherry said. "We didn't want someone building next to us."

They also wanted a place where the children could roam around without disturbing the neighbors. "With five kids, any neighborhood we moved into, we livened up," Sherry said with a laugh. Now with a nearly 40-acre back yard, the kids ride motorcycles and all-terrain cycles on their own race track and obstacle course.

Participating in sports is important to everyone in the family, and they liked what they saw in Spearfish school activities. Tanner played on Spearfish's state championship high school football team last year, and each of the other children plays on at least one team.

Dan coaches several youth teams, and Sherry helped start a volleyball league. Both said they believe it's important to contribute to community life.

Now comfortably settled in their new home, which they moved into last year, they enjoy a view of the Redwater Valley from the back deck and Crow Peak from the front veranda. When they go to Keyhole or Angostura reservoirs, Dan said, as many as seven different families of relatives show up to spend time together, reinforcing his conviction that moving home to family was the right choice.

As far as the potential for rapid population growth, Dan is more concerned with the possibility of a downturn.

"I worry about the economy being so unsettled, with Homestake, and Pope and Talbot (timber company) having so much of the employment," Dan said.

More septic tanks could be problem for Hills

Neil Stodolski had just finished describing in careful detail the soil tests his engineering firm had done at a proposed residential subdivision in Maitland Canyon.

He'd described eight percolation test holes and seven soil test pits, and presented a chart showing water absorption rates that met state standards for private septic system installations.

Responding to questions from the Spearfish Planning and Zoning Commission and a dozen skeptical subdivision neighbors, Stodolski had gone into more excruciating detail.

And after all that, some in the audience were still shaking their heads, unconvinced that 39 new homes, and 39 new septic systems, would not be a risk to contaminate local ground water.

"If they want to live in their own sewage, I guess that's their problem," one resident said.

Increasingly in this area, it's not only neighbors raising concerns about the proliferation of septic systems.

Health professionals, geologists and land-use planners are concerned about the threat of widespread ground water contamination.

Thousands of rural, private septic systems haven't yet caused more than isolated incidents. But several hundred new systems are installed each year in the three Northern Hills counties, increasingly in close proximity to each other.

"The question is, is there a number that could become a problem," said Larry Putnam, a geologist and consultant. "It's not an easy issue. There are a lot of sensitive areas and there are a lot of variables."

Roger Marshall, who recently retired after 24 years as Lawrence County's health inspector, has no shortage of examples to illustrate problems.

He recalls a phone call from an exasperated homeowner near Cheyenne Crossing. The lady complained that when she opened her water tap, she smelled sewer gas. But her septic system was working fine, as far as she could tell.

Marshall drove out to have a look and found things in order at the lady's home. Then he looked up-slope at a nearby home.

That residence also had a private septic system, and its distance from the neighbor exceeded legal requirements, Marshall said.

"But a joint had busted between the house and the tank," Marshall said. "And the sewage had found its way to the neighbor's well."

Marshall's point, one that he likes to emphasize, is that septic systems work fine -- if they're properly installed and properly maintained. And there are two big problems with those issues in the Hills.

First, Black Hills geology complicates things. Septic systems consist of settling tanks, where solids drop out, and a leachfield, where effluent is dispersed through underground pipes embedded in gravel. This effluent then percolates through the gravel and into the soil, where it decays naturally.

However, some home lots have almost no soil, but instead are underlain by sandstone virtually impervious to sewage. Rather than decomposing in soil, sewage moves laterally until the rock outcrops on a slope, forcing the sewage to the surface.

That's what has happened in the Piedmont and Black Hawk areas, where "springs" of smelly sewage keep the grass green all summer.

A dilapidated, abandoned trailer house there stands in testimony to how intractable the problem can be.

"You could smell that sewage odor," said Arvid Meland, who inspects septic systems for Meade County. "The people just gave up on it."

Talbot Wiczorek, who helped form the Piedmont Valley Water-Sewer Association to study the problem, said residents feared the study would be used to

force installation of an expensive community water system. Researchers had to promise anonymity to homeowners.

In other words, the final report could show "hot spots" -- areas where higher nitrates or harmful bacteria showed up -- but couldn't identify specific home sites.

The \$144,000 assessment, released in February, 1999, identified a number of "high-risk areas," and found that surface water quality worsened as it passed through the valley. But the study didn't pinpoint contamination sources and made no recommendations.

In contrast to impervious sandstone, an opposite geologic problem presents itself in other areas, which are underlain by porous limestone. Caverns in the rock act like pipelines, carrying water rapidly, again without decomposition.

Geologists worry that contaminants of any sort, not only sewage, could move so rapidly they could poison dozens of wells before being detected.

Meland, who inspects each new sewer system in Meade County, would like to see rural subdivisions install community sewage treatment plants instead of individual septic systems.

He figures it could cost \$10 million or more to put in central systems to fend off problems at Piedmont and Black Hawk. But residents there aren't likely to approve such an expense until forced to.

"What's got to happen is everybody's water has got to get contaminated," Meland said.

The second basic problem with septic systems, Marshall said, is that many homeowners new to the Hills have no idea what -- or where -- their septic system is. They've never had anything but central services. And they don't know that septic systems have to be monitored and maintained.

Problems created by proliferating septic systems aren't unique to the Northern Hills and residents here may benefit from research around the country. In Massachusetts, for example, the Buzzards Bay Estuary Project recently landed a \$459,000 U.S. Environmental Protection Agency grant to test and promote innovative septic systems.

Marshall cites an effort to develop a system for tiny, inner-city lots, where "urban pioneers" are reclaiming rundown neighborhoods. Septic systems built to work in an area that small could probably work in sparse soil here, he figures.

In the short term, Meade and Lawrence counties are adopting tougher rules for septic system installations, requiring for example that every installation be designed by a professional engineer.

But until the counties adopt a mandatory inspection program for existing systems, Marshall said, the problem is less than half-fixed.

"There's always the potential, absolutely" for ground water contamination from failing systems, Marshall said.

Growth puts pressure on wildlife, land

A quick, little storm had blown through the night before and left a skiff of sparkling snow dusting the forest. At a game-feeding station on the Crow Peak Game Production Area west of Spearfish, the new snow was as heavily tracked as a cattle yard but the tracks were from elk, and earthy elk scent hung in the air. Dozens of oval depressions in the snow marked where elk had bedded.

Conservation workers with the South Dakota Department of Game, Fish & Parks had dumped a 1,000-pound, round hay bale in the clearing in the Ponderosa pines a day earlier. Two-thirds of the bale was already eaten.

About 90 elk are wintering on the 2,107-acre GPA, and that's right where GF&P would like to keep them. If the herd moves north, it moves on to private land and begins to affect what wildlife managers call "landowner tolerance."

"You try to do everything you can to minimize damage to private land," said Denny Mann, assistant regional supervisor for habitat, based in Rapid City.

Wildlife managers such as Mann and wildlife biologist Rick Holseth are walking a fine line, balancing a mission to keep a healthy and growing game population while preventing wildlife damage to crops and forage. Their task is made tougher by new homes that convert winter range into back yards, forcing more game onto fewer acres.

"We're not going to change development," Holseth said. "We're going to have development. We have to work with development to minimize impact."

People measure effects of growth in personal ways. To some it means more traffic noise and dust on what was a quiet rural road. To others it's the worry of scarce water becoming more scarce, threatening a ranching livelihood.

To others it means lost recreational opportunities and bitter battles over who got where first.

A circuit judge closed down the Izaak Walton League shooting range in Meade County after neighbors complained they found the bullets lodged in walls of their homes, and said the range noise is so loud neighborhood children were emotionally upset. The court house evidence box in a civil suit over the issue holds spent rifle slugs and small chunks of house siding.

Members protested that the range has been there since 1980, long before the complaining residents built their new homes. But under 8th Circuit Judge John Bastian's order, the Izaak Walton League must install safety equipment and adhere to strict new rules and hours before members can tote rifles and shotguns back to their property.

Near Spearfish and Sturgis, more than 1,000 acres of public game management land was recently closed to firearms. State officials said wardens had been called several times by neighbors in a new subdivision who complained about stray bullets.

In Butte County a controversy is simmering between boaters and fisherman plying the Belle Fourche Reservoir and the ranchers and farmers who depend on the water for irrigation. A plan to upgrade camping and boat launch facilities has drawn fierce opposition from landowners. They're worried that recreational use will soon

take priority, and irrigators won't be allowed to draw down the water level to feed crops.

Back at Crow Peak, Mann is outlining plans to improve winter wildlife forage on the mountain, planting shrubs and trees whose shoots and buds will nourish elk and deer, hoping that will keep them off the lower elevation private land.

"We're not feeding because we want to," Mann said. "Under ideal conditions, we wouldn't feed at all."

Canyon preservation effort symbolizes Northern Hills battles

The early-morning November sun hasn't climbed high enough to warm the floor of Spearfish Canyon, and Jerry Boyer grabs a jacket and gloves before heading out of his office, a weathered log cabin near the juncture of Little Spearfish and Spearfish creeks.

Boyer, president of the Spearfish Canyon Foundation, has offered a tour of the canyon, a serpentine, 18-mile channel into the heart of the Black Hills.

With graying, shaggy hair and a full beard, Boyer looks a bit like an aging radical. And in this region of conservative politics and Old West, hands-off attitudes toward property rights, Boyer's proselytizing about preserving open space hasn't been met with cries of hallelujah.

"I'm known in the planning realm as an a-----," Boyer admits good-naturedly. "But a nice a-----. You try to make the point that you're talking about specific problems. It's not personal."

His message here in the Northern Hills is new to the region, but one that is increasingly popular nationwide. Under Boyer's leadership, the foundation has created a land trust to buy private property in the canyon to save it from development.

The Spearfish Canyon Foundation is just one of several approaches Northern Hills residents are taking to grapple with growth and change in the region. Some efforts, like Boyer's, focus on single issues. The Lookout Mountain Preservation Trust, for example, was formed to preserve Lookout from impending development. Another group of residents, concerned about the threat of ground water contamination from septic systems, formed a committee to fund a well water study in the Piedmont area.

At the same time, residents in Lawrence and Meade counties have undertaken more broadly based efforts to rewrite comprehensive plans, redefining goals and rewriting subdivision and zoning rules. Butte County, which has never had such ordinances, is struggling to shape rules palatable to large-tract ranch owners, small-lot residents and developers.

Around the rule-making whirls a battle over the best way to preserve open space, ranch land and the area's agrarian heritage without stifling the economy.

In the mix of new activist groups is Citizens for Orderly Growth, whose members are mostly business people worried all the complaining about growth will scare off new business investment in the region.

Boyer talks almost non-stop as he wheels his jeep CJ 7 around the twisting canyon bends. Interrupting himself occasionally to point out natural features, he rattles off statistics in the manner of someone who's been over this ground repeatedly.

"There are 147 homes in the canyon proper now, plus 47 undeveloped lots," Boyer says. The canyon's upper reaches are in the Black Hills National Forest but about 1,200 acres on the valley floor are privately owned and could be developed. That's what Boyer is working to stop.

"Those 1,200 acres could represent another 300 homes," he says. "It's urban sprawl that would destroy the unique biodiversity of the canyon."

He takes an almost proprietary interest in the canyon and has studied its history, natural and human. An accomplished amateur photographer, Boyer uses that skill to help spread his message. Foundation newsletters are filled with splashy images of canyon wildlife such as mountain goats and the American dipper, and its summer carpet of wildflowers

In order to raise the nearly \$2 million needed to buy the private land, Boyer has to raise the public profile of Spearfish Canyon, sing its praises to national conservation groups that could help. He's written dozens of grant proposals.

More controversial is his push for designation of the canyon road as a National Scenic Byway, which could make his group eligible for federal grants.

Gerry Bennett, with the Spearfish Canyon Owners Association, is skeptical.

"It's already a National Forest Scenic Byway. It's already a state scenic byway," Bennett said. "The whole thing is about money. Show me the money."

Bennett, who served on the task force that wrote a "corridor management plan" for Spearfish Canyon, likes many of its recommendations, including proposals to better manage garbage handling and cleanup. But he's not happy about efforts to gain national notoriety for the place, and says outside money always comes with strings attached.

"I'm saying that while that shotgun approach might work, you'll destroy the very thing you're trying to protect," Bennett said.

While Spearfish Canyon is Boyer's priority, he's involved himself in other issues. He gained a seat on the Lawrence County Weed Board, and helped turn the quiet, almost unknown commission into a debate forum.

Noxious weeds, Boyer says, are the biggest ecological threat to the Northern Hills. He wants an extra tax approved to help battle invaders such as knapweed.

Boyer was also outspoken during debate on the county master plan revision.

He has a simple explanation for his activism.

"I moved here from D.C. 20 years ago for quality of life," Boyer says. "I don't want to see that quality disappear."

Twenty years is a fair chunk of time, but many Northern Hills families trace homestead roots three or four generations back, making Boyer a "newcomer." The

label doesn't bother Boyer, who says an outsider's perspective can help solve local problems.

Meanwhile, with or without local help, the Northern Hills region continues to gain notice in national publications.

Outside magazine included Spearfish Canyon in a list of "outstanding bike rides" in the U.S. *Better Homes and Gardens* mentioned Spearfish in an article on best small towns to live in. *Field & Stream* lists Spearfish among best outdoor towns in America.

The "secret" is out.

Epilogue: Focused efforts pay dividends

In 2002, Jerry Boyer, still answers the phone as president of the Spearfish Canyon Foundation, but his work to save canyon open space is nearly finished.

"We're in the transition between winter and spring," Boyer said in a late March phone interview. "It's still white on the ground but the canyon is warming up, the water is starting to run on the side of the road. Soon we'll start seeing buds."

Debate about how to manage growth and development continues in the Northern Hills, Boyer said, although some issues have been settled in the past three years.

Preservation efforts that focused on specific, single issues were successful. Broad based planning efforts generally were not.

The Spearfish Canyon Foundation is nearing its goal of protecting 1,200 acres of privately owned land in the canyon.

"We need \$1.8 million," Boyer said. "We're at \$1.6 million at the present time. We've bought 600 acres and are just going through negotiations with the rest."

Boyer wrote 104 grant applications and had 103 rejected before a New Mexico conservation group stepped up to help.

"We have been on a journey around the world and in every peak and valley," Boyer said of the canyon foundation's preservation work.

Meanwhile, with the help of a \$200,000 state grant and city taxpayers, Spearfish bought the west face of Lookout Mountain, saving its most famous landmark from a future as a residential subdivision.

"Development is occurring around its base but the mountain will be preserved as open space," said Spearfish city finance officer Beth Benning. "It's in a conservation easement. You can hike on it but no development."

In addition to the land it purchased, Spearfish gained an adjacent parcel of about 153 acres when the owner bequeathed it to the city upon his death.

And a group called Save Centennial Valley, led by local rancher Reed Richards, has thwarted for three years a Colorado real estate company's efforts to convert the historic Frawley Ranch to homes, golf courses and shopping malls. Opponents argue the project would deplete ground water and its sewage treatment plans could contaminate water sources.

After Lawrence County officials approved the development, opponents forced a countywide referendum on the issue and defeated the plan -- twice.

Developers then agreed to annexation by Spearfish, which would put the project on central water and sewer services. Three lawsuits were filed over that annexation, said Erik Birk, Lawrence County Planning and Zoning Director, and one is still in court. That lawsuit by Save Centennial Valley contends that the countywide vote rejecting zoning changes for Frawley Ranch can't be superseded by Spearfish city zoning changes.

"It still is controversial," Birk said. "That whole area, until the lawyers stop fighting with each other and decide what is appropriate, nothing will get developed."

One trend has continued locally: There's a lot of housing development in Lawrence County but not much business growth, Benning said. Many of the new residents are empty nesters, she said.

"We have a lot of people who build upscale homes here but don't have jobs here," Benning said. "And we find our school enrollment is actually declining."

According to the 2000 Census, either Lawrence County's population is shrinking or mid-decade population estimates were off the mark. The gain for the previous decade, according to the decennial count, was just 5.6 percent, lower than the earlier estimate for the first five years of the decade alone. The county had 21,802 residents on April 1, 2000, actually 650 fewer than the 1995 estimate.

It's not clear if the smaller number is the result of faulty estimates -- a number of other U.S. cities were surprised to find their census count significantly below estimates -- or whether it represents a loss of residents.

Certainly not everyone drawn to the small towns of the Northern Hills finds everything they need. The Gibson family, profiled in the earlier story about telecommuters, moved from Spearfish to Rapid City where Mike Gibson took a job as a computer consultant.

And the Census Bureau 2001 estimate has Lawrence, Meade and Butte counties all losing population from 2000: Lawrence down another 164 residents; Meade down 20 residents to 24,233; Butte down 35 residents to 9,059.

Regarding economic development, however, Spearfish did land First Premier BankCard, a credit company that built a new facility and promises to bring 500 jobs to the community, Benning said. Fiberoptic communication lines laid through the area a few years ago were key to enticing the company to the Northern Hills. The jobs mostly pay in the \$8- to \$15 per hour range, Benning said. That's good for the Northern Hills, she said, and it will help offset a big blow suffered by the area economy when Lead's Homestake Mine, the oldest continuously operating gold mine in the country, ceased operations a year ago. Still, Homestake was considered by many to be the best employer in the region, and most miners made more than \$40,000 annually, so the changes haven't balanced out.

There's a possibility that the mine's deep tunnels, as much as 8,000 feet below the surface, could become home to a federal physics research lab that would study, among other things, subatomic particles called neutrinos. That could create about 400 jobs.

And Spearfish, courting more economic development, successfully lobbied state transportation officials to add another Interstate 90 exit for the community, which will open the city's west end to business development.

"A community that doesn't grow dies," Benning said.

Meanwhile, Lawrence County's new comprehensive plan, heralded in 1998, remains an impressive document without teeth.

"The comprehensive plan is just a vision statement of the community," Birk said. "But writing it into ordinances is the hard part."

Zoning rules have been rewritten but the public hearing process hasn't begun.

"We're still in the process of rewriting the subdivision regulations, so (the comprehensive plan) has not been successful yet," Birk said.

Birk said there's been no holdup over the drafting of ordinances; such work takes time. The county hired an attorney to do the work and that attorney has been working in private.

"There hasn't been any public debate," Birk said. "None."

The public will get its say during public hearings before the Planning and Zoning Commission and the county commission, Birk said.

And ultimately the ordinances, once approved by county officials, will almost surely be referred to a countywide vote, he said.

One Lawrence County goal was the drafting of "intergovernmental agreements" with each incorporated community, a set of guidelines to settle growth-related issues. None have been drafted.

"And they may not be," Birk said. "Intergovernmental agreements are only effective if the cities want them."

And so far the cities haven't been eager to add another layer of bureaucracy, in part because of the expense, Birk said.

"We have so much turmoil in the economy in this area," Birk said. Local officials worry that Lawrence County, which five years ago enacted a six-month zoning moratorium to slow growth, now faces the possibility of economic stagnation.

In Butte County, residents approved a permanent subdivision ordinance to replace temporary, "emergency" rules, said former County Commissioner Dick Pluimer.

But there was a tradeoff. County officials agreed to abandon efforts to enact zoning controls. Butte County hasn't written a master plan and voters rejected a requirement to obtain building permits for new construction.

A vocal minority sees every regulation as "the government telling us what we can do with our land, our God-given right to do with our land as we see fit," Pluimer said. "The group sees any toehold, into even building permit requirements, as the first step in what they see as nefarious scheme to control their way of life."

Butte County population grew by about 14.9 percent in the 1990s, according to the 2000 Census. That's a much slower pace than the more than 2 percent annual growth indicated by mid-decade census estimates.

That's a manageable rate, Pluimer said "but I'm guessing 75 percent of the growth is outside of any city."

Meanwhile, another spring day in Spearfish Canyon finds Boyer ready to head outdoors again, to take a drive up the canyon.

"I gave up my golf game five years ago and now all I'm doing is landscape and nature photography," Boyer said. "I've walked every draw to the rim, over-nighted. All I'm doing is a photojournal of the canyon, a lifetime project."

The foundation recently sold the log cabin Boyer uses as an office and will put the proceeds in an endowment fund.

But Boyer said his office will still be in the canyon.

"I bought a new Wrangler jeep and my office will be mobile -- a laptop, cellular phone," he said. "It's going to look like a big antenna."

While Boyer sounded cheerful enough, he said he's frustrated by what has become a repetitious debate and the refusal of local residents to look beyond their borders for solutions.

"Every community has to invent its own wheel," he said. "All these issues get polarized. You're either for growth or against growth. Whereas many people, like myself, want managed growth. We want quality."

Single issues will continue to take center stage while broader solutions elude people, Boyer predicted. For example, when a Florida outdoor advertising company last year began constructing giant billboards in Meade County -- including one in front of Black Hills National Cemetery -- some residents were so incensed they involved South Dakota's congressional delegation in an effort to remove the signs. But Meade County residents had repeatedly rejected proposals for a county-wide sign ordinance that could have prevented the problem.

"The irony of this is that people really do not want to take the time," Boyer said. "It's hard to slow down, take a look in a visionary way 10 or 20 years down the road. A lot of people are just too darn busy to take an interest."

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