

Gold rush hurts aquatic life

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Gold prospectors chasing \$1,600-an-ounce flecks in river bottoms east of Charlotte also might be sucking life out of the streams, experts say.

As the price of gold mounts, some weekend prospectors have turned to machines called suction dredges. The devices work like underwater vacuum cleaners, sucking gravel and dirt into sluice boxes that catch any gold and dump other material back into the river.

That's a problem for anything living on the bottom, including mussels, fish eggs and aquatic insects, which can be killed by the machines or smothered in stirred-up sediment. California placed a moratorium on the practice in 2009 because of its damage to spawning salmon.

North Carolina requires no permits for recreational prospecting. But increased pressure from enthusiasts has raised concern on the Uwharrie River, which flows through the gold-rich heart of the Piedmont about 50 miles east of Charlotte.

"There's always a couple of people down there on the weekends, suction dredging," said Jason Walser, executive director of LandTrust for Central North Carolina, a Salisbury conservation group that owns 1,300 acres along the Uwharrie. "What we have seen is a steady increase both in the number of people and in the equipment investment and the time they're spending out there."

Last spring, LandTrust posted its property to keep out prospectors, igniting a firestorm of protest, Walser said. The 51,000-acre Uwharrie



National Forest banned suction dredging about five years ago.

"If we left it unchecked it would be a big deal. It would cause some serious resource damage," said Uwharrie district ranger Deborah Walker.

The forest holds about a dozen old mining sites, and more are on private land nearby. In addition to suction dredging, forest rules prohibit prospecting with metal detectors to prevent trampling of <u>rare plants</u> or historic sites.

As prospecting pressure rose with gold prices, forest managers began working on policy changes to further limit its intensity, such as by limiting the size of sluice boxes.

Most amateur prospectors are driven more by the thrill of the hunt than by rising prices, said 15-year veteran Glenn Coleman, president of the Matthews chapter of the Gold Prospectors Association of America.

"I've got every speck I've ever found," Coleman said. But some in the 200-member chapter see prospecting as supplemental income, he said, and suction dredges are efficient tools.

"You can pull a whole lot more with a suction dredge than you can with a shovel," Coleman said. "All we're doing is taking the gold out and putting (other material) back in the creek. It doesn't hurt the rivers and creeks. All you're disturbing is the gold."

Gold has been disturbed in the Carolina Slate Belt, a geologic formation that cuts diagonally across the central Carolinas, for more than two centuries.

The nation's first gold rush began with a 12-year-old Cabarrus County



lad stumbling across a 17-pound gold nugget in 1799. North Carolina became the nation's top gold producer for much of the early 1800s, and Mecklenburg County had more mines than any other county. A federal mint in Charlotte coined Southern gold until the start of the Civil War.

North Carolina now has no commercial gold mines, but the price spike - peaking this year at its highest level in decades - has exploration companies interested again. At least three firms say they are exploring historic mining sites in the Slate Belt. They can drill without permits if they disturb less than one acre.

"There is definitely large-scale drilling in North Carolina," said Kenneth Taylor, chief of the N.C. Geological Survey.

Southeast of Charlotte, in Lancaster County, S.C., a Canadian company plans to dig the biggest gold mine east of the Mississippi. The Environmental Protection Agency opposes the plan to enlarge the Haile mine, which dates to the early 1800s, because wetlands and streams would be destroyed.

It's hard to know how many recreational prospectors are scratching at N.C. gold because they aren't generally regulated. Mining is banned only in streams of unusually high ecological value, such as trout waters, and where endangered or threatened species are found.

The U.S. Forest Service doesn't allow sluice boxes in its western North Carolina streams because they could harm rare mountain plants and animals. Gold prospecting is prohibited in three federally designated "wild and scenic" streams, the Horsepasture, Chattooga and Wilson Creek.

On the Uwharrie, suction dredging "if it's done properly, doesn't really hurt anything," said Bobby Crawford, state director of the prospectors



association. Crawford, who's also president of the Salisbury chapter, dredges from private land along the Uwharrie.

"Where it causes problems is when you get people who don't know the laws and they start going into a bank," he said, releasing sediment into the water. Crawford said fish actually cluster near dredging because it stirs up food for them.

LandTrust is especially sensitive to prospecting because the Uwharrie basin harbors rare, if not endangered, mussels. Much of the money it used in 2006 to buy the 1,300-acre tract where prospectors congregate came from a state fund that restores ecologically important streams to offset the impacts of road construction.

As gold prices soared, Walser said, calls from prospectors asking to use the site increased. State environmental agencies who advise the conservation group on managing the site warned of potential damage.

Those environmental agencies say they haven't yet documented harm to rare species - but they're wary of damage from increased prospecting.

John Fridell, a mussel biologist with the U.S. Fish and Wildlife Service in Asheville, said suction dredging kills <u>aquatic insects</u>, fish eggs and mussels sucked into the machines, and can disturb spawning areas. Dredgers also change the dynamics of a stream, altering flow patterns and releasing sediment that can smother animals like mussels that can't swim away.

"It certainly has an effect," Fridell said, "and the more intense it is the more severe the effects."

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