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Grazing raising concerns  
By Denis Cuff  
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Cattle grazing has made the environmentalist hit list of what is bad for public parklands for years.

Cows trample stream beds, pollute creeks, and hurt fish and young trees, they say.

New research, however, suggests grazing may help some animals and plants, including threatened species, living in East Bay Regional Park sites in Contra Costa and Alameda counties.

Red-legged frogs and California tiger salamanders, both listed as threatened, appear to do better in grazed than ungrazed areas, district ecologists report in studies based on years of field work.

A common lizard, two grassland birds and the kangaroo rat also fared better in grazing land, researchers said.

"There is a positive association between grazing and several species," said Joe Didonato, the park system land stewardship manager. "We want to manage our range lands to support these sensitive species."

One environmentalist said the studies don't go far enough to give the full picture of grazing impacts.

Grazing can damage fish, frogs and water quality in creeks, young oak trees in fields, and spread invasive weeds that can crowd out native plants, said Jeff Miller, Bay Area wildlands coordinator for the Center for Biological Diversity.

"I think that from the start the park district looked for information to fit their pro-grazing bias," said Miller, whose group opposed a 2001 park board decision to continue grazing to control grass levels and wildfire risks.

"I'm encouraged they are giving us some hard science for the first time," Miller said, "but they're selecting only certain species to look at."

Park officials acknowledge they have much more research to do on grazing. But they defended their studies as hard evidence that grazing does more environmental good than harm even if some people consider cow droppings unsightly.

Scientists from the park district and UC Berkeley who conducted the latest research presented their findings in a forum in Oakland last week. The work has yet to be reviewed by other scientists and published.

Cattle appear to help some species by helping their habitat, especially stock ponds that ranchers created long ago to trap water for livestock, researchers said. Stock ponds account for the bulk of ponds on park lands.

Grazing is allowed on some 60,000 acres of the 97,000 acres in the park system.

Tiger salamanders live in 75 parkland ponds where grazing occurs, but not in ponds outside of grazing areas, said Steve Bobzien, the district ecological services manager.

Most of the ponds populated by red-legged frogs were in grazed areas, he added.

When cattle were fenced-out, tiger salamanders disappeared from some ponds, Bobzien, said.

"If grazing was such a negative effect, you would expect tiger salamanders to disappear from the ponds (where grazing occurs)," Bobzien said. "Instead, when grazing was excluded, you find the salamander populations blinking out."

Cows drink water and eat pond plants, suppressing aquatic weeds that can form dense mats to blot out the open water where frogs and salamanders lay eggs, he said.

Fewer weeds means fewer water bugs to chow down newly hatched frogs and salamanders, Bobzien said.

Miller, however, said measuring the health of frogs in stock ponds isn't the only yardstick to look at.

"The stock ponds are artificial," Miller said. "We need to see what's happening with frog's natural habitat in creeks, which grazing can damage."

Park officials said red-legged frogs thrived in creeks, as well as stock ponds.

All 26 park district ponds with red-legged frogs were exposed to grazing, Bobzien said.

The western fence lizard, a food staple for the threatened Alameda whip snake, was three times more abundant on grazed park land areas, researchers reported.

Range land without grazing builds up a tall, thick thatch of perennial grasses, making it harder for the lizards to spot insects to eat, said David Riensche, a district resource analyst.

The thatch also blocks out sunlight that lizards need to regulate body temperatures, he added.

Two bird species, the grasshopper sparrows and horned larks, also were found more often on park plots where grazing is allowed, reported Michele Hammond, a UC Berkeley environmental scientist involved in one of the studies.

The birds do better where the grazing keeps the plant growth patchy, she said.

Native perennial bunch grasses used to dominate the East Bay landscape, but they have been crowded out by tall perennial grasses introduced more than two centuries ago along with cattle from Europe.

Meanwhile, development destroyed most of the Bay Area ponds where red-legged frogs lived, leaving stock ponds in cattle country as their refuge.

"The habitat has been greatly altered," Didonato said. "We're trying to make the best of it, and manage the land to benefit these species."