UC **SANTA BARBARA**



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WHITE-TAILED KITE IS UNDER SIEGE SAYS RESEARCHER

At the Museum of Systematics and Ecology at the University of California, Santa Barbara, research biologist and associate director of the museum Mark Holmgren points to charts and graphs showing the decline of a bird of prey that he has studied in the wild for more than a dozen years.

The beautiful small hawk, known as the white-tailed kite, is changing its roosting and nesting habits, and that greatly concerns Holmgren and other

conservationists. They believe that the bird is threatened by man's development of its local habitat. Holmgren's current monitoring project shows that kites are under stress, threatened locally by conversion of habitat and disruption of movement corridors where it forages for food and travels to roost communally.

Kites occur primarily in the Western United States, predominantly in California, but can be found as far north as Washington and as far south as Chile. And, they extend east to a small population in Florida. But much of what is known about kites comes from studies of Santa Barbara's Goleta Valley population which have contributed greatly to knowledge of the species throughout its range. Local publications about the kite date back to 1943 and rigorous data collection first began here in 1966.

Recently Holmgren described an overall "trajectory of decline" of the kite at a meeting with planners for the County of Santa Barbara. He suggested that kites may

be affected by development, and even though they are still around, their connection to their habitat has been seriously undermined.

"The changes we've documented place this population of kites on a trajectory toward total loss of all functions," said Holmgren. "A shift has occurred in the Goleta Valley from complex and persistent uses like breeding and roosting to more transitory and more simple uses of the habitat."

Holmgren advocated for more care in land use planning to maintain the support system for kites and the small mammal populations upon which they feed. (Kites eat house mice, California voles and western harvest mice.)

The kite, which once nested in the City of Santa Barbara, is no longer found there, but does live in the less developed community of Goleta next door. Yet even in Goleta the population is in retreat. Before the mid-90s many of the local birds bred in the open space and wetlands along the More Ranch Fault south of Highway 101, in Goleta, near UC Santa Barbara.

In 1998, there was almost no breeding south of 101, according to Holmgren. Instead, breeding is occurring north of the highway in the foothills where open space is also being rapidly converted and thus may

serve only as a temporary respite for the birds.

Another sign of fragmentation, decline and possible exodus of the birds is that fact that between three to five roost sites were used last winter, whereas normally no more than one is used by the local population. Furthermore, this main roost last winter was located north of Highway 101, a new phenomenon.

The new nesting behavior of the local kites worries Holmgren. The fact that the pattern of nesting is shifting north of Highway 101, with only one nesting area remaining south of 101, suggests larger concerns. Holmgren explained that the area south of 101 is still the best remaining local habitat, thus the nesting changes suggest that other sites south of 101, which were used historically, now lack viability for the kite, he said.

"These new patterns of kite distribution must be viewed in light of the disruptions to the connected open spaces which serve as corridors for small mammal populations -- the prey upon which kites and other birds of prey depend," said Holmgren. Recently, working in the field at Goleta's More Mesa, Holmgren observed each bird arriving home for the night in a willow grove, the only roost left south of 101. As the sun set he and a team of volunteers carefully counted 40 birds, delighting in the appearance of the last few stragglers.

The volunteers are part of a group of 20 individuals involved in controlled monitoring of the birds in an area stretching from Winchester Canyon in the west to Cieneguitas Creek in the far eastern end of the Goleta Slough Watershed.

Kites, Holmgren explained, seem to be able to tolerate some disturbance to their habitat; they are particularly resilient and can live near humans as long as the human community is adjacent to a larger open space that sustains significant small mammals for them to eat.

In one case, he found the birds nesting right on top of an unoccupied house; two broods were raised there. But Holmgren noted that this nesting would not have occurred had the house been occupied. Nor do kites nest in areas where housing dominates.

Because they are strongly associated with wetlands, kites receive some indirect protection due to the Clean Water Act, he said. Kites are also protected as designated by the conservation element of the Santa Barbara County Comprehensive Plan, the guiding document for the development of the county.

The fact that kites are showing stress in spite of their natural resilience and the legal protection that they receive from the county and federal government alarms Holmgren. "It shows that we're not doing enough regarding cumulative impacts of development," he said.

Holmgren noted that although kites are not listed as threatened or endangered, the bird is listed in the sense that it receives federal and state protection beyond that given to most species.

He described a "protective envelope," in addition to the protections mentioned above, that has so far not prevented the kites' "trajectory of decline." The envelope includes protection of all raptors under the Migratory Bird Protection Act and regional wetland mitigation policies of the Fish and Wildlife Service. Environmental reviews of kites are required by the Clean Water Act, the California Coastal Act, and the California Environmental Quality Act, but Holmgren states that these analyses

are seldom performed with necessary breadth or rigor.

Note to Editors: photos of the White-tailed Kite are available.

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