



SCHOOL OF VETERINARY MEDICINE

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Recommendations from the Yellow-billed Magpie Working Group for Impacts of West Nile Virus on Yellow-billed Magpies

To Whom It May Concern:

On December 15, 2005, a workshop was held at UC Davis to discuss the impacts of West Nile Virus (WNV) on Yellow-billed Magpies (*Pica nuttalli*). This day-long event was attended by a diverse group of scientists and representatives from state agencies and non-governmental organizations (list attached), and included presentations and discussions on the biology of West Nile Virus and mosquitoes in California, ecology of Yellow-billed Magpies, and the science of monitoring bird populations.

The following conclusions and recommendations were made by the working group:

- **Substantial concern was expressed** that WNV may endanger the welfare and persistence of Yellow-billed Magpies.
- **Data are seriously lacking; monitoring efforts are needed immediately**
 - Census and demographic data of the species are needed to estimate population sizes and exposure rates to WNV (and other threats, including habitat loss).
 - Because WNV has, and will continue to impact populations, abundance and distribution of Yellow-billed Magpies need to be tracked, beginning immediately, for at least several years so that population-level effects can be determined.
 - Scientifically rigorous monitoring at roost and nest sites is extremely important.
 - Range-wide monitoring is critical, in addition to strategically implemented intensive studies. Monitoring should consist of bird counts, demographic & ecological assessments including habitat, population genetics, banding, telemetry, and determinations of cause-specific mortality. Volunteer effort will greatly assist scientist researchers.
 - Computer-based modeling to predict population viability and test potential scenarios and management options will be valuable.
- **Funding is needed** to support monitoring of this species. Financial support would sustain roost and nest monitoring, assistance to dead bird surveillance, and support to citizen science programs which enlist volunteers to count and monitor magpies.
- **Members of the Working Group enthusiastically offered to continue working together** to help facilitate recommendations. Effective monitoring will require collaboration among many agencies, researchers, and volunteers.
- **If data indicate a need, the following potential actions may be instituted**
 - State and/or federal listing as species of special concern, threatened, or endangered. This species has not yet been placed on the state list as species of special concern due to lack of data and because the most recent listing effort (California avian species of special concern) occurred before the impact of WNV was evident. The Yellow-billed Magpie is included in the Audubon Watch List (<http://audubon2.org/webapp/watchlist/viewWatchlist.jsp>) and Partners in Flight (PIF) Watch List Species (http://www.abcbirds.org/pif/pif_watch_list.htm).
 - Protection and management of habitat, including reducing risk of mosquito-borne diseases.
 - Assessment of need, benefits, risks, and practicality of a captive breeding program.

Sincerely, on behalf of the Yellow-billed Magpies-West Nile Virus Working Group,
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List of participants of December 15, 2005 Yellow-billed Magpie Working Group

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