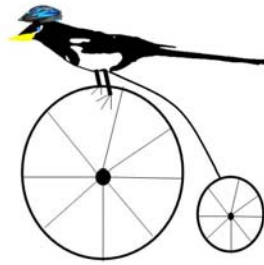


Newsletter

Summer 2010



*It started with a simple question:
I wonder what would happen to Yellow-
billed Magpies once West Nile Virus
arrived?*

Magpie Monitor Program

Many Thanks to MAGPIE MONITORS WHO KEPT WATCH ON NESTS AND MAGPIE NUMBERS

Valuable data has been contributed by a number of citizen volunteers. They kept track of nests multiple times weekly during the spring, collect feathers for DNA, and count magpies along their daily walks or bikes. This data helped with each of the projects outlined here!

The Magpie Monitor project is transitioning its volunteer effort to coordinate with [EBIRD](http://ebird.org) and California Audubon rather than collecting data separately. See the adjacent notice and log all your magpie sightings onto [EBIRD](http://ebird.org).

CHECK OUT OUR NEW EFFORT WITH THE HUMMINGBIRD MONITORING NETWORK

JOIN IN!

EBIRD and CALIFORNIA AUDUBON COUNT FOR MAGPIE CONSERVATION

JUNE 4-7 2010!

<http://ebird.org/content/ebird/ca>

Ebird will share the data with us so that we can incorporate with magpie monitor information.

SUBMIT YOUR MAGPIE SIGHTINGS AT EBIRD

Please log your magpie sightings data onto EBIRD. This will allow our group to benefit from your information, and also other researchers and the public.

IN THE DNA LAB THIS YEAR

Veterinarian/geneticist Holly Ernest, laboratory manager/technician Lisa Goldberg, PhD student Daphne Gille, and veterinary student Ben Harmeling are using Yellow-billed Magpie DNA analysis tools developed in our lab. These DNA tools will help us learn more about magpie genetic diversity, how their populations are structured over the landscape, and whether magpie deaths due to West Nile virus caused a "genetic bottleneck". A genetic bottleneck occurs when a large number of individuals are lost from a population resulting in loss of genetic diversity. Ben received a special STAR fellowship to work with us from the UC Davis School of Veterinary Medicine and Merck-Merial Veterinary Scholars program.

This next year we will be finishing up the comparison of pre-West Nile virus magpie DNA samples with post-West Nile virus samples. We defined pre-WNV as before June 2004 and post-WNV as dates following June 2004.

Now hummingbird conservation genetics and disease assessments too! Stay tuned!

UPDATE FROM LEVI SOUZA ON THIS WORK ON MAGPIE HABITAT ANALYSIS

The Yellow-billed Magpie is a California endemic bird species (only found in California) that has suffered dramatic mortality from West Nile virus (WNV). Though familiar to many who live within its range, we know surprisingly little about various aspects of the Yellow-billed Magpie's life history. Gaps in our knowledge include dispersal patterns, subpopulation status, and habitat preferences, among others.

To help answer what habitats magpies prefer and to understand how data gathered by citizen scientists compares to that gathered by trained scientists, I am currently working on building two computer models that describe the climate and vegetation types that Yellow-billed magpies use the most. One is based on observations made by birders and enthusiasts collected by ebird (www.ebird.org) and the other is based on observations made by trained biologists. I believe that this wonderful resource available from citizen scientists will result in an excellent detailing of the habitat most important to magpies.

Magpie Monitors and the UC Davis **Hummingbird Program** are dedicated to involving the public in research to better understand the relationships among Yellow-billed Magpie populations, their habitats, genetics, and diseases such as West Nile Virus. We invite and welcome participation from the citizen volunteers. The program is administered by Holly Ernest, faculty member at the UC Davis School of Veterinary Medicine.

www.magpiemonitor.org

<http://hummingbirds.ucdavis.edu/>

