

HELP NEEDED FOR A NEOTROPICAL MIGRATORY BIRD TICK COLLECTION PROJECT

Danielle Kaschube, The Institute for Bird Populations

and Ryan Harrigan, University of California

The Center for Tropical Research (CTR), Institute of the Environment and Sustainability, University of California, is asking for banders to collect ticks from any migratory bird species they capture in 2026 and beyond and send them in.

The problem: Many bird species migrate across continents, and these migratory journeys can also transport parasites, such as ticks, which may then become established in new regions, particularly as the climate warms. These ticks can carry infectious diseases that are harmful to both migratory birds and other wild and domestic animals. Some of these diseases may also be harmful to humans, so this transport of ticks by migratory birds can serve as a means of establishing emerging infectious diseases in new environments. A recent example of this is happening in Europe, as long-distance migratory birds have brought southern-hemisphere species of ticks with them, carrying the Crimean Congo Hemorrhagic Virus (CCHV), a newly established disease, into more temperate climates. **Researchers at the University of California, Los Angeles (UCLA), in collaboration with the Institute for Bird Populations (IBP), and as part of a One Health Initiative, are interested in identifying these types of ticks, the diseases they carry, their hosts, and potential pathways in North America, before they have a chance to establish themselves.**

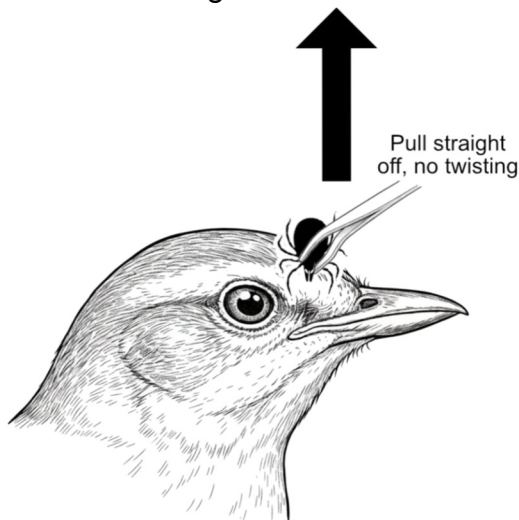
How can banders help? As part of these efforts, UCLA needs information on the types of ticks that are hitching rides on birds! **As part of the regular bird processing during banding, if banders see any ticks on the birds they are handling, we request that you remove the ticks (see instructions below) and send them in.** It is that easy! Usually, these ticks are readily seen near the eyes, bill, or head of migrating birds, as these are the locations on the body where birds aren't able to effectively preen. If your station regularly encounters ticks on birds during banding efforts, please let us know (see contact address below) to obtain tick collection kits and instructions for safely shipping tick samples. There is no cost to your operation as UCLA will provide the collection kits and shipping materials, including prepaid labels to the analysis lab. We ask that you send the ticks in once a month so we can see the numbers getting collected and what diseases might be present in the ticks.

Your help would be much appreciated, and will continue a long collaboration between UCLA and IBP to better understand our connection to migratory birds and our environment. Former and current projects include investigations into avian influenza, West Nile virus, and migratory connectivity and demography of birds across North

America. For further information on any of these projects, or more details on this one, please contact **Ryan Harrigan, Center for Tropical Research, Institute of the Environment and Sustainability, UCLA, La Kretz Hall, Suite 300, 610 Charles E. Young Drive East, Los Angeles, CA 90095, USA; Tel: (310) 206 6234; Email: iluvsa@ucla.edu**. Happy (tick) hunting!

PROTOCOL: TICK COLLECTION FROM MIGRATORY BIRDS

1. While processing an individual bird, look closely on both sides of the head and especially the ocular region (the parts with little or no feathers) for any ticks. If you see any, proceed with the next step.
2. Using the supplied tweezers (or tweezers of your choice), carefully squeeze the tick between the head and body of the tick, and pull directly away from the bird without twisting:



3. Drop the tick into one of the supplied collection vials, and write the banding number of the bird on the vial side and cap. If there isn't enough room, just write the last 6 digits.
4. If there is more than one tick on the bird you are sampling, just put those additional ticks into the same vial. One vial per bird.
5. Maximum of 10 ticks per vial – if there are more than this on a single bird (yikes!) you can remove them, but no need to collect these into the vial.
6. Assemble vials into the boxes provided as you proceed, and each station will ship these boxes once a month to the lab.

THANK YOU SO MUCH FOR YOUR HELP!