

## Western Regional News

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## Western Station Reports

## Ventana Wilderness Society's Big Sur Ornithology Lab

Ventana Wilderness Society's Big Sur Ornithology Lab (BSOL), located in Monterey County, CA, has enjoyed a very fruitful and exhilarating year. This year boasted the highest winter monarch butterfly population since BSOL biologists began long-term monitoring on the California central coast in 2001. Not long after the monarchs dispersed in March, the field crews wrapped up the winter banding season at the Carmel Middle School and shifted gears in preparation for several breeding research projects. The more significant contracts include: MAPS banding, area searches, and point counts at several locations on the Carmel River, funded through the Monterey Peninsula Water Management District, California Polytechnic State University, Dean Witter Foundation, and California Department of Parks and Recreation; on the Nacimiento and Salinas rivers, funded through the California Army National Guard; and at BSOL's permanent study site in Big Sur, funded through Monterey Peninsula Audubon Society and Dean Witter Foundation. Since 1992 BSOL has operated a constant-effort banding station at Andrew Molera State Park in Big Sur, CA, which is open to the public year-round, weather permitting.

To kick off the breeding season projects in May. BSOL was pleased to co-host with the San Francisco Bay Bird Observatory an "Advanced Aging and Sexing of Passerines" workshop led by Institute for Bird Populations Biologist, Peter Pyle. Over the course of this five-day workshop, we captured a Kentucky Warbler (first-ever banding record at BSOL) and a Northern Waterthrush. The rest of the month was full of surprises: captures included Yellow-throated Vireo (20 May), Black-and-white Warbler (22 May), two Rose-breasted Grosbeaks (28 May), a Hooded Warbler (28 May), and a Prothonotary Warbler (29 May). May was only a precursor to what was to become one of the best springs ever in Monterey County. In June, we captured an Indigo Bunting (3 June), Hooded Warbler (4 additional individuals on 5, 8, and 15 June), Rose-breasted Grosbeak (12 June), and a Summer Tanager (30 June) on the Big Sur River. On the Salinas River, we captured a White-eyed Vireo (22 June) and an Ovenbird (15 June). This spring migration will be difficult to surpass and will be cherished for many years to come in the memories of all field staff lucky enough to witness and participate in it. One of the lucky field staff includes BSOL Program Coordinator, Sarah Stock, who will be stepping down from her post to move to Michigan in Dec 2004. We invite you to visit the Ventana Wilderness Society website (http://www. ventanaws.org) to read monthly lab updates, take the monthly bird quizzes, and view updated lists of all birds.  $\hfill\square$ 

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💻 = Pictures in WBBA's Photo Gallery

## PRBO Conservation Science – Phelan Island

In 1989 Congress established the Sacramento River National Wildlife Refuge. The Sacramento River-California's largest river-has been impacted severely by a wide variety of human activities including habitat conversion, water diversion, mining, pollution, and the introduction of non-indigenous invasive species. It is estimated that 2% of the native forest remains intact. Despite these challenges, the act targeted 18,000 acres of riparian habitat along the Sacramento River between the towns of Red Bluff and Colusa, in northern California. There were no contiguous tracts of intact forest of that size left in the area. nor were there enough patchy remnants that the budding Refuge could buy. So they did the next best thing - acquired land adjacent to the river, targeting flood prone land adjacent to intact riparian forest. Combining parcels of old riparian habitat with orchards and fallow fields, the refuge began to grow. Then, in partnership with The Nature Conservancy (TNC) and River Partners, they set out to restore the land to something approaching its native state.

Our study in the Sacramento Valley began in 1993, and two years later PRBO Conservation Science began monitoring a revegetation plot at Phelan Island, using nest monitoring, point counts, territory mapping, and a MAPS station. We employ these methods at several revegetated and remnant riparian forest sites throughout the Sacramento Valley. Our goal is to use birds to evaluate restoration activities and simultaneously provide land mangers with specific biological information from which to inform restoration plans. The unit containing the banding station was planted in 1991-1992, with adjacent acreage planted in later years, totaling 180 acres. The site also contains 128 acres of intact riparian habitat, adjacent to the revegetated plot. Today the planted unit consists of mixed riparian forest dominated by Fremont cottonwood, several willow species, box elder, California sycamore, and blue elderberry. Frequent floods have deposited much woody debris and understory, dominated by Himalayan blackberry, mugwort, Santa Barbara sedge, and several species of nonnative weeds and grasses.

Using our mist-net data, we have recently calculated site-specific adult annual survival estimates of Black-headed Grosbeaks and Spotted Towhees at Phelan Island and compared them to Sul Norte, a nearby banding station situated in a 164-acre remnant of old growth riparian forest. We are particularly interested in comparing annual survival on revegetated and remnant plots due to the implications of source/sink dynamics. Survival for grosbeaks, a mid-canopy nester, was high at both Sul Norte (77%) and Phelan Island (66%). But Spotted Towhees, which nest on or near the ground, showed substantial differences (63% at Sul Norte vs 24% at Phelan Island). One possible explanation is that the forb and shrub density is much higher in the remnant riparian area, which provides better nest and foraging cover. In our time working with the refuge, TNC and the River Partners, we have been able to provide feedback in their adaptive management of the revegetation process. One recommendation was to plant understory species, which they did not do in the early-to-mid 1990s. Today however, it is a key component to all plantings, and further years of study will determine if these adaptive strategies help close the gap between the survival rates in remnant and restored forests.

For more information about PRBO, visit the website at: http://www.prbo.org/

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