

## **Press Release for July 28, 2009**

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### **Double-crested Cormorants in Sharp Decline**

Is the Double Crested Cormorant the big black canary in the coal mine of the changing San Francisco Bay ecosystem? Data collected by PRBO Conservation Science biologists from the Bay Bridge and the Richmond-San Rafael Bridge nesting colonies are showing a steep decline. Number of breeding birds dropped by 90% at the Bay Bridge (see graphic). Not since PRBO began studying these cormorants in 1988 has there been such a drop in numbers. This is yet another signal from the seabirds of a stressed marine food web in our region.

Already 2009 will be remembered as the worst year for all Bay Area cormorants in memory. Cormorants have been particularly impacted by food shortages this season. Heavy sustained March winds resulting in an over-mixing of the marine nutrients likely caused a prey disruption particularly affecting anchovy – a common cormorant prey item that is high in energetic value. This lack of food triggered a starvation event, especially noticeable among Brandt's Cormorants along the central coast of California. Preliminary results from Kathy Hieb (California Department of Fish and Game) confirm this, as the abundance of large anchovy – the most common fish in the Bay – is far below normal this year. John Field (National Oceanic and Atmospheric Administration) has also confirmed record low anchovy abundance off the central coast of California during May and June of this year, with greater anchovy numbers off southern California. This lack of food resulted in severely reduced or halted nesting at many colonies in the Bay Area, including the Farallon Islands. SF Bay cormorants were also hard hit, with Double-crested Cormorant carcasses found with the Brandt's Cormorants, no nesting of Brandt's Cormorants on Alcatraz Island, and the Double-crested Cormorant colony on the Bay Bridge dropping from 814 nests to 83 nests in the last two years. Other Double-crested Cormorant colonies in the Bay Area are showing similar declines, as corroborated by Caitlin Robinson of San Francisco Bay Bird Observatory.

"Such dramatic changes don't just happen by chance. The cormorants are telling us that something is amiss in these environments; now we need to see if they can also tell us what it is," says Dr John Wiens, PRBO Chief Conservation Science Officer.

Another reproductive study is warranted to try to determine what is causing the steep decline in Double-crested Cormorant nesting colonies in SF Bay. There could be many factors at play including food shortage, human disturbance, and pollution. Given similar declines in nesting seabirds in the region this year (Common Murre and Brandt's Cormorants), food shortage appears to be the dominant factor. Such an extreme drop in numbers is alarming; when a species as abundant as the Double-crested Cormorant disappears from the Bay, it indicates the forage fish species of the marine ecosystem are ailing.

### **About PRBO Conservation Science:**

PRBO Conservation Science, founded Point Reyes Bird Observatory in 1965, works to conserve birds, other wildlife and ecosystems through innovative scientific research and outreach. We partner with hundreds of governmental and non-governmental agencies as well as private interests to ensure that every dollar invested in conservation yields the most for biodiversity -- benefiting our environment, our economy and our communities. Visit PRBO on the web at [www.prbo.org](http://www.prbo.org).