

Scientists find 'world's least known bird' breeding in Afghanistan

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Researchers from the Wildlife Conservation Society have discovered the only known breeding area for the large-billed reed warbler, once called "the world's least known bird species." Credit: WCS-Afghanistan

Researchers for the Wildlife Conservation Society have discovered for the first time the breeding area of the large-billed reed warbler—dubbed in 2007 as "the world's least known bird species"—in the remote and rugged Wakhan Corridor of the Pamir Mountains of north-eastern Afghanistan.

Using a combination of astute field observations, museum specimens, DNA sequencing, and the first known audio recording of the species, researchers verified the discovery by capturing and releasing almost 20 [birds](#) earlier this year, the largest number ever recorded.

A preliminary paper on the finding appears in the most recent edition of *BirdingASIA*. The authors include: Robert Timmins, Naqeebullah Mostafawi, Ali Madad Rajabi, Hafizullah Noori, Stephane Ostrowski and Colin Poole, of the Wildlife Conservation Society; Urban Olsson of Göteborg University, Sweden; and Lars Svensson.

The recent discovery of large-billed reed warblers in [Afghanistan](#) represents a watershed moment in the study of this bird, called in 2007 the world's least known bird species by BirdLife International. The first specimen was discovered in India in 1867, with more than a century elapsing before a second discovery of a single bird in Thailand in 2006.

"Practically nothing is known about this species, so this discovery of the breeding area represents a flood of new information on the large-billed reed warbler," said Colin Poole, Executive Director of WCS's Asia Program. "This new knowledge of the bird also indicates that the Wakhan Corridor still holds biological secrets and is critically important for future conservation efforts in Afghanistan."

The find serves as a case study in the detective work needed to confirm ornithological discoveries. The story begins in 2008, when Timmins was conducting a survey of bird communities along the Wakhan and Pamir Rivers. He immediately heard a distinctive song coming from a small, olive-brown bird with a long bill. Timmins taped the bird's song. He later heard and observed more birds of the same species.

Initially, Timmins assumed these birds to be Blyth's reed warblers, but a visit to a Natural History Museum in Tring, United Kingdom to examine bird skins resulted in a surprise: the observed birds were another species. Lars Svensson—an expert on the family of reed warblers and familiar with their songs—then realized that Timmins' tape was probably the first recording of the large-billed reed warbler.

The following summer (June 2009), WCS researchers returned to the site of Timmins' first survey, this time with mist nets used to catch birds for examination. The research team broadcast the recording of the song, a technique used to bring curious birds of the same species into view for observation and examination. The recording brought in large-billed reed warblers from all directions, allowing the team to catch almost 20 of them for examination and to collect feathers for DNA. Later lab work comparing museum specimens with measurements, field images, and DNA confirmed the exciting finding: the first-known breeding population of large-billed reed warblers.

WCS is currently the only organization conducting ongoing scientific conservation studies in Afghanistan—the first such efforts in over 30 years—and has contributed to a number of conservation initiatives and activities in partnership with the Afghanistan Government, with support from USAID (United States Agency for International Development). In 2009, the government of Afghanistan gazetted the country's first national park, Band-e-Amir, established with technical assistance from WCS's Afghanistan Program. WCS also worked with Afghanistan's National Environment Protection Agency (NEPA) in producing the country's first-ever list of protected species, an action that now bans the hunting of snow leopards, wolves, brown bears, and other species. In a related effort, WCS now works to limit illegal wildlife trade in the country through educational workshops for soldiers at Bagram Air Base and other military bases across Afghanistan.

Situated between the mountainous regions of the Pamirs in Tajikistan, Pakistan, and China, the Wakhan Corridor supports a surprisingly wide range of large mammal species, including Marco Polo sheep (or argali), ibex, lynx, wolf, and the elusive snow leopard.

Provided by Wildlife Conservation Society

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