



## Green Alchemy: Can Markets Save Biodiversity?

by Ricardo Bayon

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**W**orldwide, environmental markets are all the rage. The best known international markets are probably in industrial emissions, such as carbon dioxide, worth billions of dollars. But some countries also have markets in wetlands, soil salinity, and even sand.

What is an environmental market? Take wetlands, for example. Under the Clean Water Act of 1972, developers in the United States must offset wetland losses by creating or restoring another wetland with similar watershed functions and values. You can either do this yourself or pay one of a growing number of "wetland mitigation" businesses to do this for you. The wetland mitigation market in the United States is now worth an estimated \$1 billion. Although wetland credits must be locally bought and sold, the market is rapidly acquiring various national actors.

However, when it comes to biodiversity, there is no globally or even nationally

tradable unit, such as an area of wetland. The destruction of tiger habitat in Siberia, for example, isn't really offset by the creation of lynx habitat in Spain. Biodiversity values tend to be localized.

So the big question is this: Can markets for biodiversity be established?

In the United States, a cap-and-trade model for biodiversity conservation is emerging nationwide; although, the trend is perhaps most visible in California. There, a process sometimes known as conservation banking has evolved. The process mimics the wetland mitigation model, with the mitigation being done for habitat damage. The first conservation bank was for an endangered songbird, the coastal California gnatcatcher, which lives in coastal sage scrub, a habitat much coveted by developers. The story is quite instructive.

In 1993, at about the time that the gnatcatcher was finally added to the California endangered species list, Bank of America foreclosed on a 263-acre (105-ha) property known as the Carlsbad Highlands. Because the property had coastal sage scrub, the bank suddenly found its

development options severely limited. Anyone developing the land would have to pay large sums to mitigate damage to gnatcatcher habitat.

At about the same time, the California Department of Transportation had a gnatcatcher problem of its own: It was building a highway on prime gnatcatcher habitat. The two problems turned into a solution: the California Department of Transportation found Bank of America and paid it to mitigate damage from the highway to gnatcatcher habitat. As part of this payment, the agency purchased a conservation easement on 83 acres (33 ha) of the bank's property. In exchange for mitigation credits, that part of the Carlsbad Highlands would never be developed.

Two years later, the Carlsbad Highlands became the State's first government-sanctioned conservation bank. It has since sold all of its mitigation credits (about 180

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*GREEN MARKETS CAN CONSERVE SPECIES SUCH AS THIS LESSER LONG-NOSED BAT (LEPTONYCTERIS YERBABUENA) BUT SUCCESS OFTEN DEPENDS ON NONTRADITIONAL PARTNERSHIPS.*

### WHAT'S INSIDE?

#### ECOSYSTEM SERVICES

- ◆ International Perspective: Ecosystem Services: Realizing the Full Value of Forests ..... 2
- ◆ Paying for Water-Related Services From Forests ..... 3
- ◆ Voluntary Markets Set the Stage for Carbon Trading in the United States ..... 4
- ◆ Heritage Tourism: Learning From Italy's "Green Province" ..... 5
- ◆ News Bits From Around the World ..... 6
- ◆ Bulletin Board ..... 8