

The MoSI Program: *Monitoreo de Sobrevivencia Invernal* (Monitoring Winter Survival)

Coordinated monitoring of long-distance migratory and resident birds in the Neotropics.

Right: Distribution of 194 bird-banding stations that have registered with the MoSI program through winter 2010-11.



About half of the bird species that breed in the temperate forests of North America over-winter in the northern Neotropics. Although these species spend more than half the year on their tropical wintering grounds, little is known about their habitat needs while there. IBP and partners across the northern Neotropics initiated the MoSI program in the winter of 2002-03 to provide information on the habitat needs of migrant birds in the tropics. Through winter 2010-11, more than 60 cooperators have contributed data to the program from 194 stations. These stations have operated in 14 countries stretching from Mexico to Colombia (see map, above).

During the first 9 years of the MoSI program, cooperators have contributed ~ 50,000 banding records of migratory birds and ~ 28,000 records of resident birds from across the study region. This astounding effort highlights both the unprecedented scale of this collaboration and the huge contribution that each MoSI collaborator is making toward understanding habitat needs of migratory songbirds on the wintering grounds.

To illustrate the magnitude of these contributions, consider for example, Wood Thrush (*Hylocichla mustelina*), a target species of both the MoSI and MAPS (see page 3) programs. The number of Wood Thrushes banded as part of the MoSI program between 2002 and 2011 (1,844 individuals) accounts for about 84% of all Wood Thrushes banded with USGS Bird Banding Laboratory bands in Mexico and Central America during those years, and more than 30% of all Wood Thrushes banded south of the US border since 1960 (as far back as digital records are available). The MoSI program has helped to energize bird banding in the Neotropics. Ongoing analyses of MoSI data will provide new insight into the movement patterns and habitat needs of Neotropical migratory birds during the non-breeding season, and will provide a science-based rationale for conservation efforts in the region.

Left: In addition to aiding in the study and conservation of Neotropical migrant species like Wood Thrush, MoSI stations are also providing much needed information about resident Neotropical species – like this Blue-crowned Motmot.



Right: Setting up a MoSI station in lowland tropical forest of Guatemala.

