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Important Bird Areas AMERICAS

EL SALVADOR

Oliver Komar & Ricardo Ibarra-Portillo

A close-up photograph of a Golden-cheeked Warbler (Dendroica chrysoparia) perched on a branch. The bird has a bright yellow forehead and throat, a black cap, and a black and white striped body. It is surrounded by green leaves and branches of a pine-oak forest.

The Golden-cheeked Warbler (*Dendroica chrysoparia*), El Salvador's only Endangered bird, occurs at two of El Salvador's IBAs as a winter visitor. The species breeds only in central Texas (USA) and winters in pine-oak forests of the Mesoamerican highlands.
Photo: Carlos Funes



Country facts at a glance

Area:	21,040 km ²
Population (2008):	7,066,000
Capital:	San Salvador
Altitude:	0–2730 m
Number of IBAs:	20
Total IBA area:	316,467 ha
IBA coverage of land area:	15%
Total number of birds:	546
Globally threatened birds:	3
Globally threatened birds in IBAs:	2
Country endemics:	0

General introduction

El Salvador differs from other Middle American countries in two important ways: it lacks a Caribbean coastline, and has the highest human population density. It is also the smallest Central American country. This mountainous nation is located completely within the Pacific slope, with the Pacific Ocean abutting the entire southern border. It is nonetheless a highly biologically diverse country, located in the heart of the Mesoamerican Biodiversity Hotspot (Conservation International 2009). Guatemala borders El Salvador to the west, and Honduras to the north and east.

El Salvador is a constitutional democracy with an elected president who is both chief of state and head of government. The government's legislative branch, the unicameral National Assembly (*Asamblea Nacional*) consists of 84 elected representatives. Administratively, El Salvador is divided into 14 departments. The country's economy relies heavily on export agriculture commodities (coffee and sugar) as well as remittances from expatriates (mostly in the United States), and to a lesser extent on textiles and manufacturing.

The so-called "founding fathers" of El Salvador were Spanish or European colonists who claimed some of the best agricultural lands of Central America. The rich volcanic soils allowed this tiny country to become a major agricultural producer, despite its small size at just 21,040 km². Intensive agricultural exploitation during the nineteenth century deforested most of the country by the 1800s. The native indigenous Chorti (Maya), Lenca and Pipil (Nahua) cultures were all but wiped out, and the country became the most densely populated nation in the American continent.

Today, over 90% of El Salvador's population is of mixed European and indigenous ancestry (mestizo). About 9% is of European ancestry (white) and about 1% are Amerindian (CIA 2009), although some sources indicate that nearly 5% are indigenous. Almost one third of the population lives in greater metropolitan San Salvador, the capital. El Salvador has no official religion although Roman Catholicism and Protestantism account for 57% and 21% of the population respectively (5% other religions and 17% non-religious, CIA 2009).



Just a few kilometers from El Salvador's capital is Volcán de San Salvador IBA (SV007). The Boquerón has interesting highland birds and also an impressive, 500-m deep crater.
Photo: Oliver Komar

Important Bird Areas AMERICAS

El Salvador's vibrant conservation community struggles to conserve remnant natural areas while its 7 million-strong population continues to grow, but there are encouraging signs for the environment. As the country modernizes, some agricultural lands have been abandoned and are recovering as young forests. Close to 20% of the country has natural (although not necessarily original) vegetation. Another 6 or 7% of the country has shaded crops, such as coffee, grown under a rich canopy of diverse species of tropical trees. Infrastructure for tourism has proliferated, opening the door for ecotourism. The country offers modern hotels and shopping malls, complete cell phone coverage, new seaports, the largest airport and the best road system of Central America. The national language is Spanish, but the national currency is the U.S. dollar.

Indeed, ecotourists may be surprised to learn how much there is to see in El Salvador. The country has a rich diversity of ecosystems,

a wide altitudinal range, and many protected areas, albeit frequently quite small. Large coastal bays attract migrating shorebirds and herons, mangrove swamps sport abundant wildlife and nesting colonies of waterbirds. With a topography dominated by approximately 50 volcanoes, tropical forests are spread across four different Central American ecoregions: dry forests, Chiapas moist forests, pine-oak forests, and montane forests (including cloud forests). Notably absent are the humid rain forests typical of other Central American countries with Caribbean coastlines, and there are no real deserts and few natural grasslands.

El Salvador has similarly high biodiversity levels as other Central American countries. Although, the species lists of neighboring countries (Guatemala, Honduras and, across the Gulf of Fonseca, Nicaragua), are indeed longer, they are no more than expected for countries of much greater area than El Salvador.

Conservation and protected area system



El Salvador's national park service was created in 1974, as an office within the Ministry of Agriculture and Livestock (MAG) when the state purchased what is now Montecristo National Park. During the following 15 years, the service achieved the formal declaration of just four protected areas. In 1991, the government created the Secretariat for the Environment (SEMA), and soon proposed a much larger network of 125 state properties as a protected area system (SEMA 1994). In 1997, SEMA morphed into the Ministry of Environment and Natural Resources (MARN), and in 2001, the old park service at MAG was closed, with parks management passing to MARN's office of natural heritage. In 2005, the Natural Protected Areas Law was passed, which created guidelines for the declaration of protected areas, but also technically invalidated previous laws under which areas had been protected. Since then, MARN has been working to formally and legally ensure the protection of the country's natural areas. As of the end of 2008, 50 of 118 proposed areas had been legally declared (Néstor Herrera pers. comm.).

In 2004, a national land use and development plan (PNODT 2004) introduced the concept of Conservation Areas as an implementation strategy for a national biological corridor. There are 15 such conservation areas (in reality regions) which contain a total of 63,670 ha of proposed or formal protected areas, just 3% of the country's area (Table 1).

Table 1. Conservation Areas (regions) in El Salvador.

Conservation Area (Departments)	IBAs
Alotepeque - La Montaña (Chalatenango)	1
Alto Lempa (Santa Ana, Chalatenango, San Salvador, Cabañas, Cuscatlán)	1
Apaneca -Ilamatepec (Sonsonate, Santa Ana)	1
Bahía de Jiquilisco (Usulután)	2
Costa del Bálsamo (La Libertad)	0
El Imposible - Barra de Santiago (Ahuachapán)	2
El Playón (La Libertad)	1
Golfo de Fonseca (La Unión)	2
Jaltepeque - Bajo Lempa (San Vicente, Usulután)	1
Los Cóbano (Sonsonate)	1
Nahuaterique (Morazán)	1
San Vicente Norte (San Vicente)	0
Tecapa - San Miguel (San Miguel, Usulután)	1
Trifinio (Santa Ana)	2
Volcán Chingo (Santa Ana)	0

Within the 15 Conservation Areas are 87 complexes, or groups, of government or private properties managed as protected areas. Four of these complexes are called national parks. MARN manages Montecristo National Park as a model, and has assigned management of the remaining areas, through co-management agreements, to non-governmental organizations (NGOs) or community development associations (ADESCOs in Spanish). The Protected Areas System (SANP as it is known locally) includes five of the 24 terrestrial ecoregions of Mesoamerica.

El Salvador has two biosphere reserves registered with UNESCO. The Apaneca-Ilamatepec Biosphere Reserve, located in the Conservation Area of the same name, includes Los Volcanes National Park and several smaller protected areas. Part of the conservation objectives of this reserve are social: preserving and recuperating traditional (biodiversity-friendly) practices of coffee cultivation and the last indigenous villages in the country. The Xirihualtique-Jiquilisco Biosphere Reserve, located in the Bahía de Jiquilisco Conservation Area, was created to recover traditional ecological knowledge related to the use and management of coastal resources at one of the most important mangrove ecosystems in Central America (Zulma de Mendoza, pers. comm.).



Barra de Santiago (SV001) and Jiquilisco y Jaltepeque (SV014) IBAs each attract hundreds of Wilson's Plover (*Charadrius wilsonia*), and are listed as important wintering sites in this species' Conservation Plan. The latter site is also an important breeding area with more than 60 pairs. Photo: Marvin Rivas

El Salvador signed the Ramsar Convention on Wetlands in 1971 and ratified it in 1998. As of 2008, the country had declared three Ramsar sites (all IBAs). Laguna El Jocotal, declared in 1999, is a freshwater lagoon covering just 1200 ha in the coastal plain, and an important refuge for marsh birds. In 2005, the extensive Bahía de Jiquilisco saltwater and brackish mangrove ecosystem (63,500 ha) was declared. Also in 2005, Cerrón Grande (Lago Suchitlán) was declared a Ramsar site. This area includes a section of El Salvador's largest river, the Río Lempa, dammed for hydroelectric production in the 1970s, and of great regional importance to migratory waterbirds. The government has initiated efforts to declare two additional freshwater lakes, Lago de Güija (within SV005) and Laguna de Olomega (SV018), as Ramsar sites. At Bahía de Jiquilisco, MARN has worked with local communities to declare a complete ban on resource extraction over five years in two areas of mangroves, totaling 1747 ha, in hopes of recovering wildlife populations (Enrique Barraza, pers. comm.).

“In 1997, a working group for bird conservation was formed which now meets monthly to discuss bird conservation issues.”

Ornithological activity has steadily increased in El Salvador since the end of a 12-year civil conflict in 1991. In 1997, a working group for bird conservation was formed, as a national chapter of the Partners-in-Flight hemispheric network of bird conservation organizations. This group operates an electronic list-serve and since 2006 has met monthly to discuss bird conservation issues. The principal participants are university students, government technicians working at MARN's natural heritage office, and staff of the SalvaNATURA Conservation Science Program. The group began the publication of a newsletter called Aratinga in 2008.



Lake Coatepeque caldera (crater lake) from Cerro Verde, overseeing part of the Complejos Los Volcanes y San Marcelino IBA (SV004). The National Park in this IBA has been managed by SalvaNATURA since 2003.

Photo: Melissa Rodríguez

Ornithological importance

Compared to most other countries in the Americas, El Salvador's relative ornithological importance does not stand out. For example, no bird species are found only in El Salvador, only three bird species are globally threatened, and only one qualifies as Endangered. But considering the country's diminutive size and its location in the middle of the Mesoamerican Biodiversity Hotspot, bird diversity is impressive and there are some important conservation opportunities for birds. As a case in point, 21 bird species occurring in El Salvador have ranges restricted to areas less than 50,000 km² (just the

size of Costa Rica but more than twice the size of El Salvador) and are endemic to northern Central America. Not only is the country rich in tropical bird species (more than 300), such as motmots and quetzals, but also in migratory species that breed far to the north in Canada and the United States. Close to 200 species of North American migrants visit each winter, spring or fall (some are only transients that pass through on their way between North and South America).

There are two Endemic Bird Areas (EBAs) recognized by BirdLife International that include parts of El Salvador (Stattersfield *et al.* 1998). The North Central American Pacific slope (EBA 017) includes just two restricted-range species that are found in El Salvador, the White-bellied Chachalaca (*Ortalis leucogastra*) and the Blue-tailed Hummingbird (*Amazilia cyanura*). The North Central American highlands (EBA 018) is a much richer area, including 19 restricted-range species occurring in some parts of El Salvador, mostly in two mountain ranges along the Honduras border, and to a lesser extent on the slopes of the higher peaks in the coastal volcanic range. Examples are Blue-throated Motmot (*Aspatha gularis*), Fulvous Owl (*Strix fulvescens*),

SalvaNATURA (El Salvador Ecological Foundation) is the largest environmental NGO in El Salvador, and since 1991 has managed El Imposible National Park. Beginning in 1997, the foundation facilitated bird conservation and research projects at several important natural areas. In 2001, SalvaNATURA joined the BirdLife network as the national affiliate, and in 2003, created the Conservation Science Program, with a strong focus on ornithology and bird population monitoring throughout the country. By 2008, SalvaNATURA's bird monitoring programs had grown to include five projects and seven full-time staff working at nine natural areas. The Conservation Science Program grew into the Conservation Science Department, with additional (non-ornithological) staff and has carried out rapid ecological evaluations (birds and other taxonomic groups) at natural areas throughout El Salvador as well as in neighboring countries. This group, in collaboration with MARN, led the IBA identification process during 2006 and 2007. They also developed El Salvador's first avian Red List (Komar *et al.* in prep).

Many Salvadorean biologists maintain an interest in birds, and several have begun bird monitoring programs outside of the SalvaNATURA group, with involvement of other environmental NGOs, such as CEPRODE and FUNDARRECIFE. In collaboration with MARN, the latter group has begun a marine seabird survey. MARN itself has taken the lead on a national shorebird survey. For more than five years, a group of independent and MARN biologists carried out winter duck surveys, with assistance from Ducks Unlimited.

Wine-throated Hummingbird (*Atthis ellioti*) and Rufous-collared Robin (*Turdus rufitorques*).

Globally threatened bird species found in El Salvador number only three, although a couple of others are expected to occur in the poorly-studied off-shore waters. One of the three is the migratory Pink-footed Shearwater (*Puffinus creatopus*; VU), a pelagic (off-shore) species not currently found in any El Salvador IBA. The others are Highland Guan (*Penelopina nigra*; VU) and Golden-cheeked Warbler (*Dendroica chrysoparia*; EN), a resident and a winter visitor, respectively, found together in the humid pine-oak forests in northern El Salvador along the Honduras border.

A few sites stand out as having special ornithological importance. Montecristo National Park and El Imposible National Park were identified as the most important areas for nationally-threatened bird species (Komar 2002), many of which now have their only populations within the country restricted to just one of these two parks. Unfortunately, these parks are quite small, just 2000 and 4000 ha, respectively. The Xirihualtique-Jiquilisco Biosphere Reserve includes the only known or principal nesting sites in Central America for several shorebird species. The Cerrón Grande reservoir and Ramsar site is a major wintering location for migratory ducks and freshwater waterbirds, with the highest abundances recorded for any wetland in Central America (Herrera *et al.* 2007).

The minuscule Wine-throated Hummingbird (*Atthis ellioti*) is one of 19 restricted-range species found in the North Central American highlands EBA in El Salvador. It is found at just three sites in the country, all IBAs. Photo: Carlos Funes



IBA overview



A total of 20 IBAs are recognized in El Salvador, covering 15% of the country's area, or 3165 km² (Table 2, Figure 1). Only two sites meet the A1 criterion, each providing habitat for two of three globally threatened birds present in the country. Five additional sites meet the A2 criterion for restricted-range species and a total of 19 sites qualify under the A3 criterion for biome-restricted species (Table 2).

During 2006 and 2007, staff from SalvaNATURA and MARN, in consultation with the ornithological community, applied standard BirdLife IBA methodology (BirdLife International 2006) to propose a suite of 20 sites

“Most NT species are too widespread to serve as IBA trigger species, the migratory Painted Bunting visits so many sites across the country it is impractical to use as an IBA indicator.”

where the bird communities indicate sites of high conservation value, indeed, of global bird conservation importance. These sites have been documented in the World Biodiversity Database (WBDB) and their compliance with BirdLife IBA criteria has been validated by BirdLife staff.

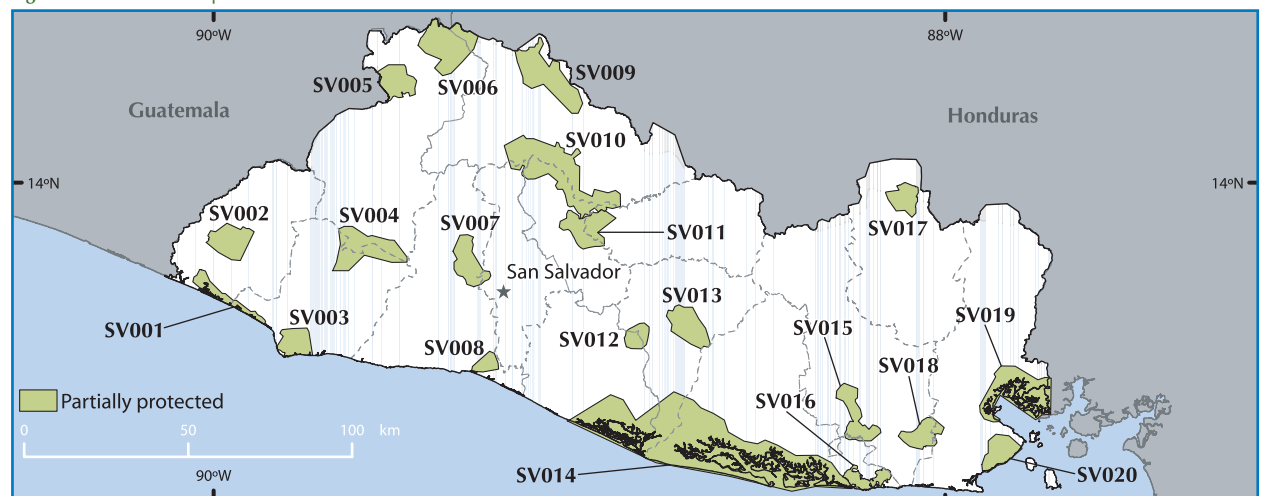
Two globally threatened species in El Salvador, Highland Guan (*Penelopina nigra*) and Golden-cheeked Warbler (*Dendroica chrysoparia*), are found in similar pine-oak forest habitat. They are both found in good numbers (more than 30 individuals) at two IBAs, Bosque Montecristo (SV006) and Sierra de Alotepeque (SV009). Thus, only two sites in El Salvador qualified as IBAs under A1 criterion. Near-threatened (NT) species were not considered to trigger sites in El Salvador for global IBA status (see Methods). If they had, perhaps only one additional site, Bosque El Imposible (SV002), would have qualified under A1, for protecting El Salvador's last population of Great Curassow (*Crax rubra*), with several hundred surviving there. Most NT species are too widespread to serve as IBA trigger species. For example, the migratory Painted Bunting (*Passerina ciris*), visits so many sites across the country in reasonably high numbers that it is impractical to use as an indicator of IBAs. It surpasses the standard BirdLife abundance criterion (90 individuals for a NT passerine) at most farms or coffee fincas of any considerable size during the non-breeding season.

Table 2. Important Bird Areas in El Salvador

IBA code	IBA name	Adm unit	Area (ha)	A1				A2	A3	A4				
				CR	EN	VU	NT			A4i	A4ii	A4iii	A4iv	
SV001	Barra de Santiago	Ahuachapán	2,500						X					
SV002	Bosque El Imposible	Ahuachapán	5,414						X					
SV003	Los Cóbanos	Sonsonate	7,949						X					
SV004	Complejos Los Volcanes y San Marcelino	Santa Ana, Sonsonate	16,205					X	X					
SV005	San Diego y La Barra	Santa Ana	8,347						X					
SV006	Bosque Montecristo	Santa Ana	17,054	1	1	1	X	X						
SV007	Volcán de San Salvador	La Libertad, San Salvador	9,635					X						
SV008	Deininger	La Libertad	3,094						X					
SV009	Sierra de Alotepeque	Chalatenango	17,647	1	1		X	X						
SV010	Cerrón Grande	Cabañas, Chalatenango, Cuscatlán, San Salvador	37,702						X					
SV011	Bosque Cinquera	Cabañas, Cuscatlán	11,579					X	X					
SV012	Volcán de San Vicente	San Vicente	4,368						X					
SV013	La Joya	San Vicente	10,053						X					
SV014	Jiquilisco y Jaltepeque	La Paz, San Vicente, Usulután	103,744						X					
SV015	Volcán de San Miguel/Laguna El Jocotal	San Miguel	9,105					X	X					
SV016	Colinas de Jucuarán	Usulután	4,984					X	X					
SV017	Río Sapó/Perquín	Morazán	9,471						X					
SV018	Laguna de Olomega	La Unión, San Miguel	7,184						X					
SV019	Bahía de la Unión	La Unión	22,547						X					
SV020	Volcán de Conchagua	La Unión	7,885						X					

For information on trigger species at each IBA, see individual site accounts at BirdLife's Data Zone: www.birdlife.org/datazone/sites/

Figure 1. Location of Important Bird Areas in El Salvador





The Near Threatened Painted Bunting (*Passerina ciris*) is found at all of El Salvador's IBAs. This declining migratory bird is a non-breeding visitor from the southern United States.

Photo: Vicky Galán

A total of seven sites meet the A2 criterion for restricted-range species (Table 2). Colinas de Jucuarán (SV016) is the only IBA for the North Central American Pacific slope EBA as it is the only site where both Blue-tailed Hummingbird (*Amazilia cyanura*) and White-bellied Chachalaca (*Ortalis leucogastra*) are present (the chachalaca is widespread throughout the lowlands in El Salvador, including many sites with little natural habitat). Six sites were designated for the North Central American highlands EBA, including two IBAs on the Honduras border and three in the coastal volcanic chain. A further site (also on the Honduras border), Río Sapó/Perquín (SV017) qualified for the latter EBA as the only regular nesting site in El Salvador for the restricted-range Red-throated Parakeet (*Aratinga rubritorquis*).

All but one of the 20 IBAs meet the A3 criterion for biome-restricted species. Most remnant fragments of dry forest in El Salvador contain representatives of the Pacific Arid Slope (PAS) biome bird community, such as Long-tailed Manakin (*Chiroxiphia linearis*) and Banded Wren (*Thryothorus pleurostictus*). No less than 17 IBAs are home to this bird community. The IBA, Colinas de Jucuarán (SV016) had the most complete community, with 80% of the indicator species present. One of the potential indicator species, Yellow-winged Cacique (*Cacicus melanicterus*), widespread in western México, occurs only marginally in El Salvador, with an isolated population at Los Cóbano IBA (SV003), on the western coast near the Guatemala border. Two sites had important communities of Middle American highlands biome-restricted birds, such as Resplendent Quetzal (*Pharomachrus mocinno*), Golden-browed Warbler (*Basileuterus belli*) and Blue-crowned Chlorophonia (*Chlorophonia occipitalis*). Bosque Montecristo is home to 90% of El Salvador's indicator species for this community, while 65% reside in Sierra de Alotepeque (SV009). No sites in El Salvador complied with the A4 criterion for exceptionally high numbers of congregatory species.

All 20 IBAs contain protected areas within their boundaries. According to data maintained by MARN, these protected areas cover 86,104 ha, or 27% of the total IBA area, leaving 73% of the land within the

IBAs unprotected. Most of the protected areas (81%, or 69,945 ha) are government-owned land, usually licensed by MARN for co-management to NGOs or local community development associations. All four national parks (El Imposible, Los Volcanes, San Diego y La Barra and Montecristo) lend their names to the IBAs that contain them. A considerable proportion of protected lands within IBAs (19%, 16,112 ha) are private reserves; notable examples are found at Sierra de Alotepeque, Volcán de San Vicente (SV012), and Río Sapó/Perquín (SV017). Only a tiny fraction (46 ha) are municipal reserves.

The 15% of El Salvador included in the IBA system represents more or less 75% of the remaining natural habitat. Although the key indicators for IBA selection were bird species adapted to just two forest types (dry deciduous forest and humid pine-oak forest), we consider that all of the major habitat types in El Salvador are represented within the IBA system. For example, all of the country's cloud forests, most remaining fragments of humid premontane jungle, the principal mangrove forests and tidal estuaries are all covered by the IBA network.

All of El Salvador's IBAs provide habitat to boreal migratory birds. The highest numbers of migratory species have been recorded at wetland IBAs, such as Jiquilisco y Jaltepeque, a large coastal estuary (146 species) and Volcán de San Miguel/Laguna El Jocotal (SV015; 125 species). Other wetland sites also hold over 100 species. Upland sites lacked the habitat for migratory ducks and waders but several are used by nearly 100 species, mostly passerines. Outstanding upland IBAs for migrants include Bosque El Imposible (99 species) and Complejos Los Volcanes y San Marcelino (SV004; 89 species). Both IBAs contain national parks administered by SalvaNATURA, where long-term bird monitoring is carried out. Another IBA with long-term bird monitoring is Bosque Montecristo; although this site has fewer migrants (64 species), it has the highest density in El Salvador of the Endangered migratory species, Golden-cheeked Warbler (*Dendroica chrysoparia*), and is regularly visited by Near-Threatened migrants such as Olive-sided Flycatcher (*Contopus cooperi*) and Golden-winged Warbler (*Vermivora chrysoptera*).

Opportunities



The IBA program in El Salvador has helped leverage several important conservation projects. One project funded by BirdLife in 2006 and 2007 and implemented by SalvaNATURA, collected monitoring information at Bosque El Imposible and Bosque Montecristo IBAs, and trained local community-based residents to participate in the collection of monitoring data and bird population data. The community involvement helped raise the local awareness of the biological importance of these sites. The project also provided training to local ecotourism guides, and provided health services and water treatment in two poverty-stricken communities adjacent to national parks. Another SalvaNATURA project funded by National Audubon Society in 2008 and 2009, is providing community education, guide training, habitat clean-ups, and shorebird population monitoring at the Jiquilisco & Jaltepeque (SV014) IBA (Box 2).

“Long term bird and habitat conservation depends on mobilizing local communities inside IBAs as stewards and caretakers.”

SalvaNATURA, as the BirdLife affiliate in El Salvador and national coordinator of the IBA program, has identified community training as the most important IBA conservation strategy. A comprehensive conservation program would need to reach out to the approximately 110 rural communities existing within El Salvador’s IBAs. It is unrealistic for SalvaNATURA to effectively carry out conservation projects at more than just a few communities, yet long term bird and habitat conservation depends on mobilizing local communities inside the IBAs as stewards and caretakers of the important natural resources around them. In order to achieve such a goal, in 2009 SalvaNATURA established a formal training program for community-based environmental leaders (Box 1), and will offer training to leaders in communities located within IBAs throughout northern Central America, thanks to generous grants from several institutions, including Citi Foundation. The training consists of: (1) introducing community-based activists or entrepreneurs to a series of tools that can increase their efficiency as grass-roots mobilizers, (2) informing them of the global importance of their neighborhood, and (3) introducing them to a network of supporters and technical assistance.

Box 1

IBA identification provides impetus for Mesoamerican conservation training program



Bird monitoring with mist nets has proven to be a useful environmental education tool for children at Bosque El Imposible IBA (SV002).
Photo: Roselvy Juárez

The development of the IBA program in El Salvador led to the creation of the Communities and Biodiversity Training Program, as a strategy for increasing on-the-ground conservation action within the nearly 100 IBAs of northern Central America. Several hundred small communities are located within the IBAs, and the only way to assure protection of so many sites is to motivate the local people to take action. SalvaNATURA, the BirdLife affiliate in El Salvador, with financial assistance from the Citi Foundation, Humane Society International, the Critical Ecosystems Partnership Fund and other donors, will offer a short course to 100 community leaders during 2009, from Hon-

duras, Guatemala, Nicaragua and El Salvador, at its training center in the San Miguelito community, located within the Bosque El Imposible IBA (SV002). The course consists of introducing community leaders to a series of tools for increasing their effectiveness at project development and management, environmental education and outreach. They will learn why the natural areas around their communities are of global conservation importance to birds, and gain insights on how to enroll their communities in appreciating and valuing these threatened natural areas. They will also gain access to long-term technical assistance and a network of supporters.

El Imposible National Park is located within Bosque El Imposible IBA (SV002).
Photo: Oliver Komar

IBA status key to obtaining conservation funding

Box 2

One of El Salvador's two world heritage sites is the Xirihualtique-Jiquilisco Biosphere Reserve, a large coastal bay and estuary site. As the first coastal IBA identified in El Salvador, this site garnered the attention of SalvaNATURA and National Audubon Society (BirdLife partner in the US), who worked together to obtain \$30,000 in grant funds for shorebird conservation at the site during 2008 and 2009. The determination of IBA status was key in winning these funds. The first year of field work included environmental education for more than 300 school children, bird identification training for 12 tour guides, and the removal of 32 tons of trash washed up on 20 km of beaches and mudflats. The project also included weekly monitoring of shorebirds, and nest counts of seven breeding species, including American Oystercatcher (*Haematopus palliatus*), Wilson's Plover (*Charadrius wilsonia*), Black-necked Stilts (*Himantopus mexicanus*), and beach-nesting Lesser Nighthawks (*Chordeiles acutipennis*). In 2008, project researchers documented El Salvador's first successful nesting of Collared Plovers (*Charadrius collaris*), but complete failure at the continent's southernmost colonies of Least Tern (*Sterna antillarum*) and Black Skimmer (*Rynchops niger*).



A 2-day old Least Tern (*Sterna antillarum*) at the Jiquilisco-Jaltepeque IBA (SV014), home of the only documented colony for the species on the Pacific shore of Central America. In 2008, high tides wiped out the colony.
Photo: Esmeralda Martínez



The southernmost nesting colony of the North American race of Black Skimmer (*Rynchops niger niger*) is located at the Jiquilisco-Jaltepeque IBA (SV014) in El Salvador.
Photo: Esmeralda Martínez

Next steps for the IBA program in El Salvador include popularizing the concept, through Spanish-language publications, IBA designation celebrations at the site level, official recognition by the El Salvador government, and installation of signage where roads intersect IBA boundaries. A priority will be to provide training and technical assistance to conservation activists working inside each of the IBAs. Another urgent challenge, of considerably higher difficulty, is to expand the current protected area coverage within each IBA.

“SalvaNATURA has identified community training as the most important IBA conservation strategy.”

Further information

Data sources

The information on IBAs presented here is also available in the World Biodiversity Database (WBDD).

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