

SAINT LUCIA

Paul Butler, P.O. Box 1277, Kingstown, St. Vincent, West Indies

LOCATION: 13°55'N 60°59'W, between Martinique (30 km north) and Saint Vincent (30 km south)

AREA: 616 sq km POPULATION: 120,300 (census 1980) CAPITAL: Castries

Climate is tropical with two distinct seasons: a dry season from January to April, and a wet season from June to November. Annual rainfall varies seasonally and with altitude in the range 1,500 - 3,500 mm, mean temperature is 27°C. The island is subject to hurricanes; the most recent (Hurricane Allen 1980) caused widespread damage to housing, agriculture, forests and reefs.

St. Lucia supports most of the major vegetational associations found in the Lesser Antilles; there are small areas of cloud forest on the summits, rainforest on the lower slopes, dry woodland on the lower ground near the coast, cactus scrub in the north, and extensive littoral woodland vegetation on the east coast. Few good stands of mangrove remain.

AGENCY RESPONSIBLE FOR WILDLIFE:

Forest and Lands Department
Ministry of Agriculture
Castries, St. Lucia
809 45 23231
Chief forest Officer: Gabriel Charles

LEGISLATIVE PROTECTION FOR WILDLIFE: Avifauna protected under 1980 "Wildlife Protection Act" St. Lucia is a signatory of CITES.

PROTECTED AREAS: In addition to the Government Forest Reserves which comprise 16,800 acres, a further 22 areas have been set aside comprising mangrove and off shore islets important for seabirds.

NATURE TRAILS: Edmund Forest - Mahaut (Rainforest)
Union (Dry Scrub Forest)
Pigeon Island National Park (Littoral Woodland, Seascapes)

AVIFAUNA: St. Lucia supports four single-island endemic species (Danforth 1935, Bond 1956, Johnson 1988, ICBP in press): St. Lucia Parrot *Amazona versicolor* (E = endangered), post-hurricane (1980) population estimate 150 (Butler and Jeggo 1980) which had increased to estimated 200-250 birds by 1986 (Jeggo 1986); St. Lucia Black Finch *Melanospiza richardsoni* widely distributed in all habitats, but uncommon everywhere (Trail and Baptista 1989) and regarded as threatened (Collar and Andrew 1988); Semper's Warbler *Leucopeza semperi* (E) inhabits forest understory, probably nests on/near ground and is therefore vulnerable to mongoose predation, only five recorded in last 40 years, and not located during a systematic survey in 1987 (Woods 1987); St. Lucia Oriole *Icterus laudabilis* recorded recently as generally distributed throughout most habitat types and in no immediate danger, provided habitats are not destroyed (Faaborg and Arendt 1985). However, the Shiny Cowbird (*Molothrus bonariensis*) that arrived in St. Lucia in 1931 (Danforth 1932) may pose a threat. In the Greater Antilles the Black-cowled Oriole (*Icterus dominicensis*) and the Troupial (*Icterus icterus*) are frequently parasitized (Wiley 1985, Perez-Rivera 1986, Cruz and Wiley 1989), and it is probable that other species of *Icterus* in the Antilles are affected. While no direct information on parasitism rates of the St. Lucia Oriole is available, an adult oriole was observed feeding two fledgling cowbirds at Vanard in July 1984 (Post 1984, Cruz and Nakamura 1985, Post *et al.* Ms).

A total of eight species endemic to the Lesser Antilles occur on St. Lucia (AOU 1983, ICBP in press); Lesser Antillean Swift *Chaetura martinica* (Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent and possibly Nevis); Purple-throated Carib *Eulampis jugularis* (Saba, St. Eustatius, St. Kitts, Nevis, Montserrat, Antigua, Dominica, Guadeloupe, Martinique, St. Lucia, St. Vincent); Lesser Antilles Flycatcher *Myiarchus oberi* (St. Kitts, Nevis, Barbuda, Guadeloupe, Dominica, Martinique, St. Lucia); Forest Thrush *Cichlherminia lherminieri* (Montserrat, Guadeloupe, Dominica, St. Lucia); Trembler *Cinclocerthia ruficauda* (Saba, St. Eustatius, St. Kitts, Nevis, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent); White-breasted Thrasher *Ramphocinclus brachyurus* (Martinique, St. Lucia); Scaly-breasted Thrasher *Margarops fuscus* (Saba, St. Eustatius, Barbuda, south of Grenada and Barbados, possibly extirpated on Barbuda and Grenada); Lesser Antillean Bullfinch *Loxigilla noctis* (Virgin Islands, Lesser Antilles from Anguilla and Saba south to St. Vincent and Barbados, also on Grenada).

The following threatened birds are listed by King (1978-1979) in addition to the threatened single-island endemic species given above: Tundra Peregrine Falcon *Falco peregrinus tundrius* (E); St. Lucia Wren *Troglodytes aedon mesoleucus* (E), formerly believed to be restricted to the Grand Anse Valley in the north-east, but recently found elsewhere at Caille Des, Louvet, Marquis, and Petite Anse, although no longer present at Chastanet, Piton Flore or Edmond Forest where it was once widespread (Woods 1987); St. Lucia White-breasted Thrasher *Ramphocinclus brachyurus sanctaeluciae* (E), population believed to be at most 75 pairs in 1971 confined to dry scrub in five valleys of the north-east coast between Grand Anse and Louvet in an area 8 km by 1.5 km (King, 1978-1979), and estimated at 60 pairs (Woods 1987) of which 50% breed in the Ravine de la Chaloupe where suitable riverine vegetation persists. St. Lucia Forest Thrush *Cichlherminia lherminieri sanctaeluciae* (E), restricted to La Sorciere and La Chaloupe ravines in the north-east, where it inhabits semi-arid forest, populations of the other subspecies on Guadeloupe and Montserrat being thought to be more plentiful (King, 1978-1979) while the density on Dominica is known to be 0.5-1.0 individuals per ha in closed canopy forest (Evans 1986). A subspecies of the Rufous Nightjar *Caprimulgus rufus otiosus*, a South American species, occurs only on St. Lucia in the Caribbean. Woods (1987) located it in dry scrub woodland at Grand Anse, Caille Des, Louvet, Maly bon and near Petite Anse River.

Information on seabirds on St. Lucia is poor: Halewyn and Norton (1984) list the following species as probably breeding: Red-billed Tropicbird *Phaethon aethereus*; White-tailed Tropicbird *P. lepturus*; Magnificent Frigatebird *Fregata magnificens*; Roseate Tern *Sterna dougallii*; Bridled Tern *S. anaethetus*; and Brown Noddy *Anous stolidus*.

AVIFAUNA RESEARCH IN THE PAST DECADE:

St. Lucia Parrot

- Butler, P. 1978. St. Lucia Research Report North East London Polytechnic. pp. 1-30.
- Butler, P. 1980. St. Lucia Parrot - its changing status and conservation. In Conservation of New World Parrots. Proceedings of ICBP Parrot Working Group Meeting. St. Lucia, 1980.
- Butler, P. 1987. St. Lucia Parrot, *Amazona versicolor* - Recipe for Success. GOSL.
- Jeggo, D., 1980. The effects of Hurricane Allen on the status of the St. Lucia Parrot. Jersey Wildlife Preservation Trust Report 17.
- Jeggo, D. A survey of the St. Lucia Parrot in 1982. Jersey Wildlife Preservation Trust Report 19

Purple-throated Carib Hummingbird

Schuchmann, K. L. and G. Schuchmann-Wegert. 1984. Notes on the displays and mounting behavior in the Purple-throated Carib Hummingbird (*Eulampis jugularis*). Bonn. zool. Beitr. 35:327-334.

Antillean Crested Hummingbird (*Orthorhyncus cristatus exilis*)

Schuchmann, K. L. 1979. Notes on the song, territorial behaviour and the display of the Antillean Crested Hummingbird *Orthorhyncus cristatus exilis*. Bull. Brit. Ornith. Soc. 99:30-32.

St. Lucia Wren, Rufous Nightjar, Semper's Warbler, St. Lucia Oriole, White-breasted Thrasher

Woods, P. 1987. ICBP/Univ. of East Anglia St. Lucia Expedition 1987. Summary Report. Unpubl.

St. Lucia Black finch

Trail, P. W. and L. F. Baptista 1989 The behavior, status, and relationships of the endemic St. Lucia Black Finch. Nat. Geogr. Res. 5:82-97.

Lesser Antillean Bullfinch (*Loxipasser noctis*)

Bird, J. R. 1983. Behavioral and ecological comparisons of Lesser Antillean Bullfinches: A study of the evolution of sexual dimorphism and monomorphism. Unpub. Ph. D. Diss. Univ. of Montana. 201 pp.

Bennett, D., Cruz, A. and T. K. Nakamura. 1986. Breeding biology and ecology of the Lesser Antillean Bullfinch. Amer. Ass. for the Adv. of Science and the Colorado-Wyoming Academy of Science. Abstract.

The Shiny (Glossy) Cowbird

The Shiny Cowbird an avian brood parasite, is endemic to South America, Trinidad and Tobago, but during the last 100 years the species has spread through the West Indies, reaching St. Lucia in 1931 (Danforth 1935; Post and Wiley 1977, Cruz et al. 1985, 1989). From 1982 to 1985, the biology of the Shiny Cowbird and its interactions with potential host species in St. Lucia were studied by researchers from the Univ. of Colorado and the Charleston Museum.

Post, W. 1984. Shiny Cowbird Project: Lesser Antilles (St. Lucia): Report submitted to the government of St. Lucia, Ministry of Agriculture, Lands, and Fisheries. 8 pp.

Cruz, A. and T. K. Nakamura. 1985. The breeding biology of the Shiny Cowbird and host species in St. Lucia - 1984 breeding season. Report submitted to the government of St. Lucia, Ministry of Agriculture, Lands, and Fisheries. 18 pp.

Nakamura, T. K. and A. Cruz. 1986. The breeding biology of the Shiny Cowbird and host species in St. Lucia - 1985 field season. Report submitted to the government of St. Lucia, Ministry of Agriculture, Lands, and Fisheries. 20 pp.

Post, W., T. K. Nakamura, and A. Cruz. Ecology of the Shiny Cowbird in St. Lucia - comparisons with other islands. Ms.

Avifaunal Assessments

Faaborg, J.R. and W. J. Arendt. 1985. Wildlife assessments in the Caribbean. Rio Piedras, Puerto Rico, Institute of Tropical Forestry.

RESEARCH REQUIRED (AVIFAUNA): Research expeditions should be encouraged and special attention paid to:

The Forest Thrush
The Semper's Warbler

Bird banding work should be carried on a regular basis with special emphasis placed upon the banding and study of our migratory birds.

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- Collar, N. J. and P. Andrew. 1988. Birds to watch: the ICBP world checklist of threatened birds. Cambridge: ICBP Techn. Publ. no. 8.
- Cruz, A., T. Manolis, and J. W. Wiley. 1985. The Shiny Cowbird: a brood parasite expanding its range in the Caribbean region. Pp. 607-620 *In* Neotropical Ornithology. P. A. Buckley, M. S. Foster, R. S. Ridgley, and F. G. Buckley, (eds.) Ornithological Monographs 36: American Ornithologists' Union, Washington D.C.
- Cruz, A. and T. K. Nakamura. 1985. The breeding biology of the Shiny Cowbird and host species in St. Lucia - 1984 breeding season. Report submitted to the government of St. Lucia, Ministry of Agriculture, Lands, and Fisheries. 18 pp.
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- Cruz, A., J. W. Wiley, T. K. Nakamura, and W. Post. 1989. The Shiny Cowbird *Molothrus bonariensis* in the West Indian Region - biogeographical and ecological implications. *In* C. A. Woods (ed.), Biogeography of the West Indies: past, present, and future. Bull. Flor. State Museum. *In Press*.
- Danforth, S. T. 1932. The Dwarf Cowbird (*Molothrus bonariensis minimus*) in St. Lucia. *Auk* 49:96-97.
- Danforth, S. T. 1935. The Birds of Saint Lucia. Univ. of Puerto Rico. Monog., Series B. 129 pp.

- Evans, P.G.H. 1986. Dominica multiple land use project. *Ambio* 15:82-89.
- Faaborg, J.R. and W.J. Arendt. 1985. Wildlife assessments in the Caribbean. Rio Piedras, Puerto Rico, Institute of Tropical Forestry.
- Halewn, R. van and R. L. Norton. 1984. The status and conservation of seabirds in the Caribbean. Pp. 169-222 in J. P. Croxall, P.G. H. Evans and R. W. Schreiber (eds.). Status and conservation of the world's seabirds. Cambridge, ICBP Techn. Publ. no. 2.
- ICBP (in press). The ICBP list of single-island endemic birds. Cambridge, ICBP.
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- Johnson, T. H. 1988. Biodiversity and conservation in the Caribbean: profiles of selected islands. ICBP Monograph 1.
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