

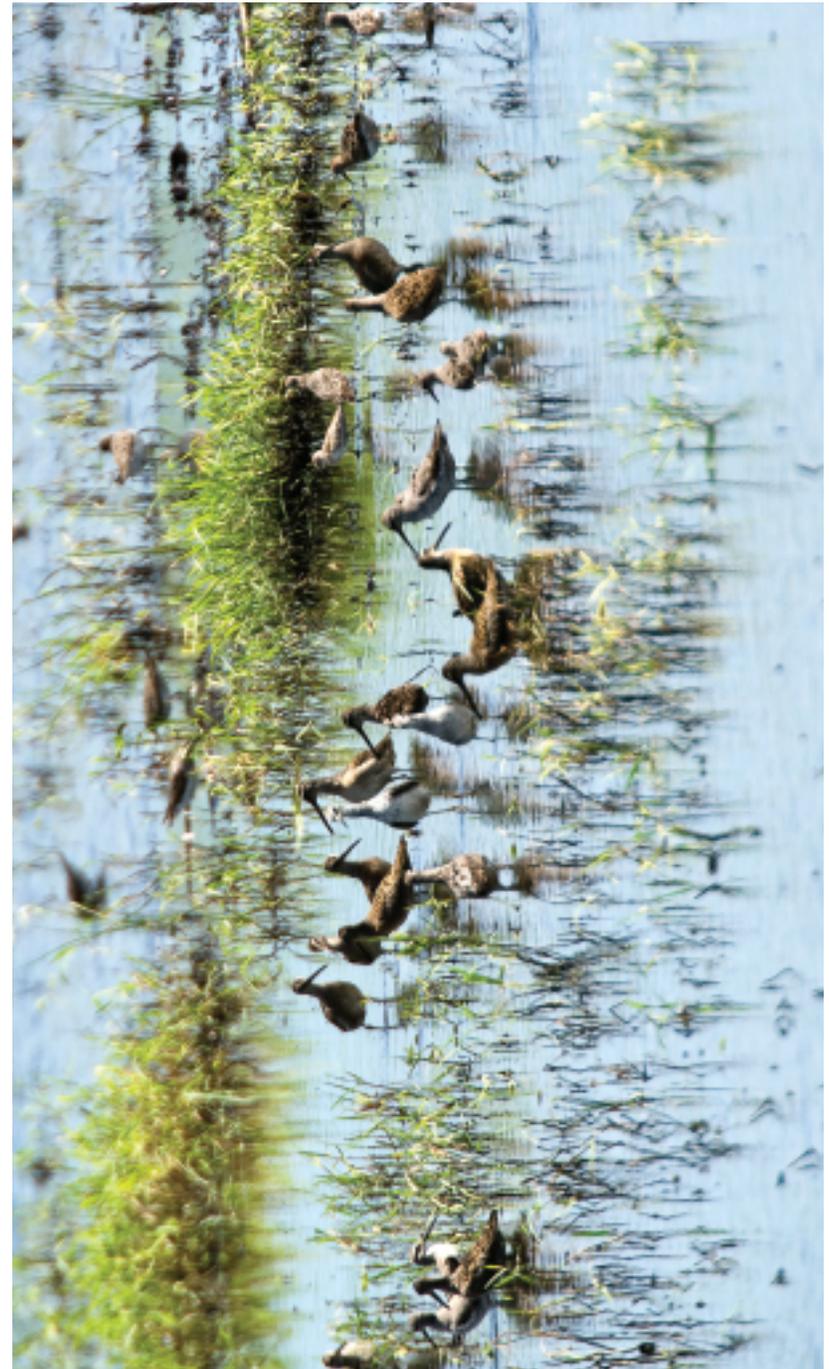
Shorebird Conservation on Barbados

Wayne Burke

Every year tens of thousands of Nearctic-nesting shorebirds stop on Barbados while on their southbound migration to South America where they pass the non-breeding (southern summer) season. These sandpipers and allies are masters of flight as is to be expected of such long distance migrants. Aptly and affectionately described by Peter Matthiessen (1973) as “wind birds,” annual epic migrations propel some species from the high Arctic in July to the southern tip of South America by September. And, back to the Arctic to nest again the following June!

American Golden-Plover (*Pluvialis dominica*) and Hudsonian Godwit (*Limosa haemastica*), for example, take migration up another notch. After a preliminary flight from nesting grounds in the western Nearctic to staging areas in Maritime Canada, they take a great circle route over the western Atlantic to South America. Almost the entire populations of these two species fly this route in two waves: First the adults, followed, weeks later, by the hatch-year birds. Adverse weather in the Atlantic during the flight can force large numbers to stop for shelter on Barbados. Rather, *there used to be* large numbers of American Golden-Plover in these flights.

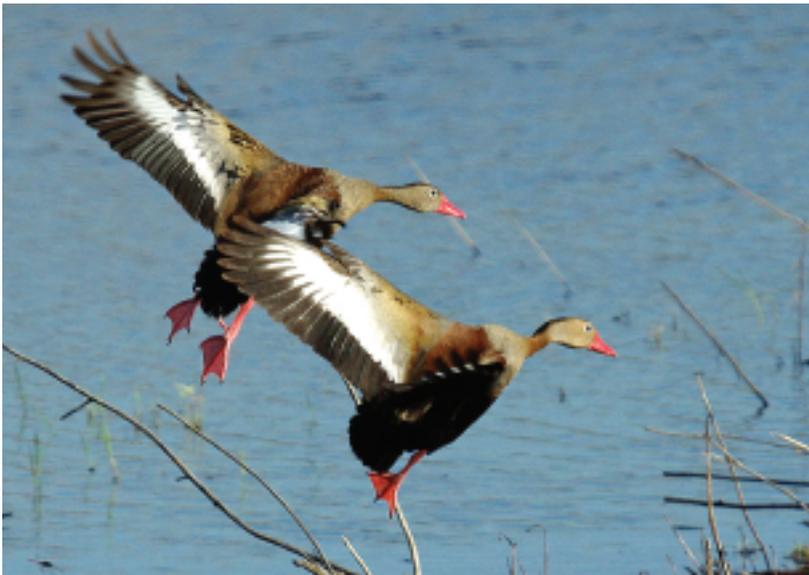
This plover numbered in the millions in the nineteenth century. The most recent, reliable population estimate is only 200,000 individuals (Morrison et al. 2006). Excessive market hunting on spring migration through the plains of the southern United States devastated the species. Escalating habitat loss and degradation on stop-over and non-breeding grounds in recent decades does not help. Further, the effects of global warming, increasing sea levels, and earlier snow melt and insect abundance on Nearctic breeding



Group of mixed shorebirds at Woodbourne Shorebird Refuge Photo: Andre Williams

grounds, combined with the resulting genetic “bottleneck” of such a drastic reduction are just some of the unknowns bearing on the population of this species (Clay et al. 2009).

The rigours of migration and a low reproductive rate are two factors affecting populations of all species of shorebirds (Morrison et al. 2006). Recent studies have documented alarming declines in the numbers of many species of these “wind birds” at Continental and Global levels (Morrison et al. 2006, Bart et al. 2007). Barbados’ position in the Atlantic makes it an important stop-over for shorebirds during adverse weather. This did not go unnoticed by Barbadian planters and the shooting of shorebirds has been a



Black-bellied Whistling-Ducks Photo: Richard Roach

tradition on Barbados since the early colonial era. Hunting continues today in specially prepared “shooting swamps” and, despite the hunting, these swamps have been identified as Important Bird Areas (IBAs) (Burke 2008).

Robert Schomburgk (1848), reports that during a storm of September 12, 1837 shorebirds were so numerous that “they were struck down with stones, and thousands were shot.” Local newspapers remarked that “there had not been so great a flight since the storm of 1780.” Many of the birds killed on the island during that storm were American Golden-Plover and Eskimo Curlew (*Numenius borealis*) now most probably extinct. Again,

unsustainable commercial hunting in the nineteenth century on spring migration through the southern United States embarked this curlew on a rapid flight to extinction. The last certain record of Eskimo Curlew *anywhere* was of a bird shot in the St. Lucy Shooting Swamps IBA in 1963 (Burke 2008). Indeed, the “scorebooks” kept by the hunters over many years are a valuable source of data that would reveal much about shorebird population trends to scientific analysis.

As part of a larger project which is increasing survival prospects for migratory shorebirds on the island, BirdLife International got the lease on an abandoned shooting swamp at Woodbourne. The wetland is situated on the flank of the St. Philip Shooting Swamps IBA. Two former hunters were instrumental in securing the lease and financing the initial restoration of Woodbourne Shorebird Refuge (WSR). Restoration work started in May and the swamp was ready for the southbound migration of 2009.



Section of plover bank and feeding tray at WSR Photo: Richard Roach

Woodbourne Shorebird Refuge

Though there was little foul weather and water levels were low at WSR, small flocks of Lesser Yellowlegs (*Tringa flavipes*) arrived at WSR on schedule on July 21. Another passage of this species occurred on August 21-22 coinciding with nearly two inches of rain. On the evening of August 21, for example, in excess of a hundred “longlegs” were at WSR (pers. comm. Edward Massiah). The flight continued into the next day when there were forty-nine Lesser Yellowlegs feeding at WSR at 3.00 p.m.

Lesser Yellowlegs has a population of 400,000 and is “declining in eastern North America” (Morrison et al. 2006). It is listed by the

United States Fish and Wildlife Service (USFWS 2008) as a Bird of Conservation Concern (BCC). This species often arrives in small flocks (Hutt 1991), and it is most rewarding to watch “a parcel” arrive. On several occasions arriving “parcels” would bathe and preen in a tight group then spread out and attempt to claim a feeding territory from their conspecifics.



Short-billed Dowitcher is a species of conservation concern

Photo: Richard Roach

Flock after flock and day after day, flights of adult Lesser Yellowlegs, depending on the weather, pour through or pass near Barbados en route to northern South America. Then, weeks later, come the hatch-year birds – the “second flight long-legs.” From an impressively large temporal/spatial data-set in

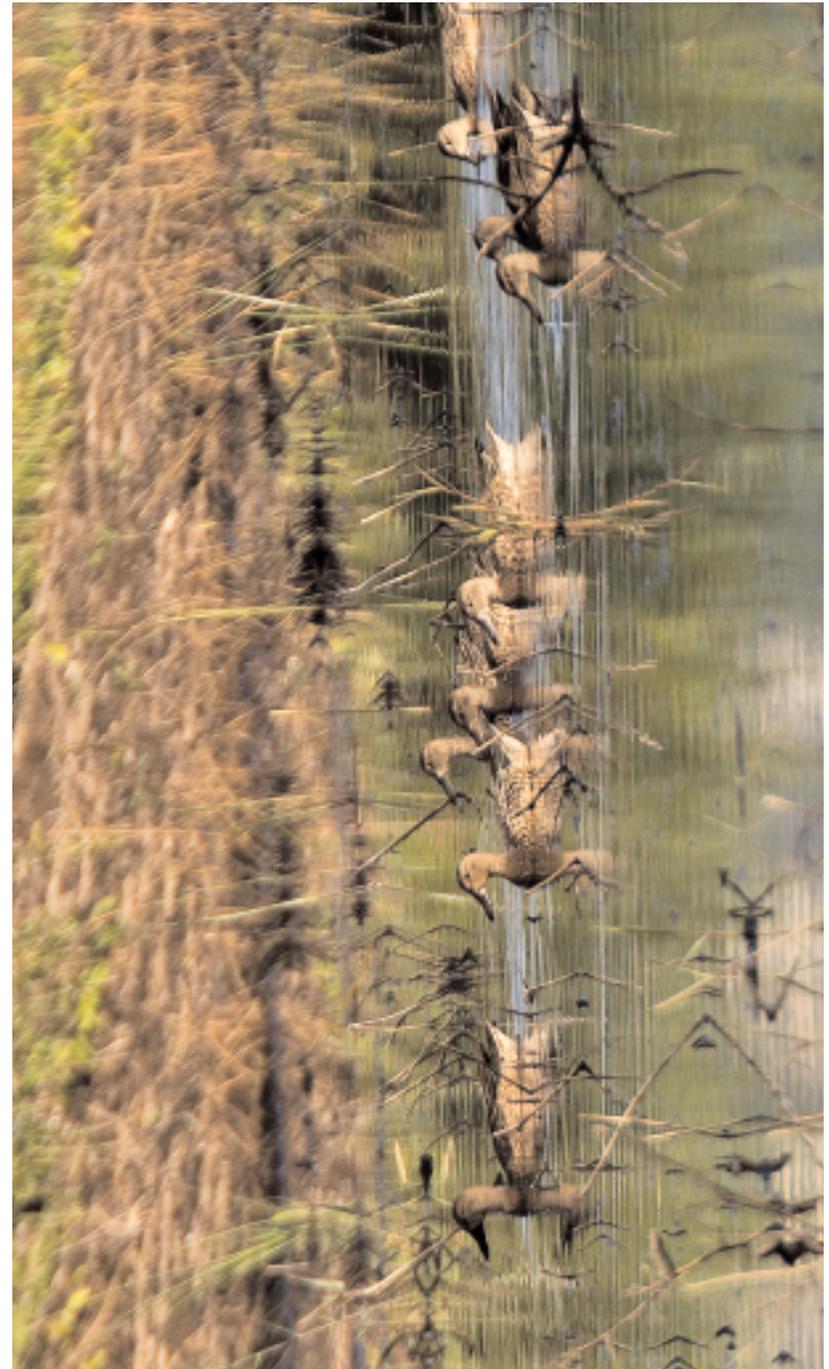
Maritime Canada (source point of birds passing the island), Bart et al. (2007) demonstrate population declines of this and other species of shorebird that are passage migrants through Barbados and into South America. A storm in the tropical Atlantic is just one of the hazards of migration that “wind birds” endure.



Lesser Yellowlegs is a species of conservation concern

Photo: Richard Roach

Flight after flight and species after species arrive on the island, more often than not, with the passage of extreme weather conditions that impede effective flight. In its first season, twenty species of shorebird were observed at WSR. More are to be expected including the marathon flyer Hudsonian Godwit, Whimbrel (*Numenius phaeopus*), Upland Sandpiper (*Bartramia longicauda*), and Buff-breasted Sandpiper (*Tryngites subruficollis*) all BCCs (USFWS 2008). Another BCC, the Semipalmated Sandpiper (*Caladris pusilla*) amasses in flocks totaling in hundreds with other small shorebirds like White-rumped Sandpiper (*Caladris fuscicollis*) and Least Sandpiper (*Caladris minutilla*). All engage in eye-defying, erratic flights of unison that exemplify speed and agility, suggesting not a great mass of



Blue-winged Teal Photo: Andre Williams



American Golden-Plover Photo: Richard Roach

individuals but a single organism.

Not only shorebirds, but many other species of waterbird find the wetlands of the St. Lucy and St. Philip IBAs suitable for their needs. In this respect, WSR has the additional advantage of the wooded swamp at the foot of the coral escarpment which is used as a roost by herons and egrets. Without these artificially managed and maintained wetlands Barbados' avian species richness would be considerably diminished. Migratory and resident herons and egrets, for example, find the shallow ponds very attractive for fishing. Gulls and terns, ducks, rails, and coots would have far less available habitat without these wetlands.



Pectoral Sandpiper
Photo: Richard Roach

Indeed, nearly every year some wayward bird from across the Atlantic can find a place to rest in a swamp after its flight.

A day of shorebird watching can hold pleasant surprises. Out of a blue sky and on a fresh easterly breeze on September 4, a flock of thirty-nine adult American Golden-Plover wheeled down to the large "plover bank" at WSR. In fair or foul weather, the principal aim of WSR is to provide a haven for shorebirds and waterbirds. Not least, this handsome golden-spangled, black-breasted plover heading for summer in southern South America.



G.R. 'Stud' Cuke greening
"The Hutt"

Photo: Andre Williams

Communication and Cooperation

Many individuals were most generous with advice, equipment, and other resources in restoring and improving shorebird habitat at WSR. Among them were ex-hunters, hunters, conservationists, and a growing group of hunter-conservationist. Through the agency of Dr. Karl Watson, President of the Barbados National Trust, a grant was secured from the Peter Moores Barbados Foundation for the construction of a comfortable shelter from which to monitor the flights. The hut is called "The Hutt" after Captain M.B. Hutt (1919-1998),

on whose observations and records modern field ornithology in Barbados is built. Hutt's advocacy for conservation – for example the preservation of Graeme Hall and Chancery Lane swamps, Turner's Hall Wood and the Scotland District – still resounds.

The Bajan hunter of today is far better informed than that of Schomburgk's time. Though a few may choose to remain "in denial," most hunters recognize that in order to continue hunting, it must be sustainable. BirdLife International is working with the hunters to change rather than stop the tradition. The old culture of "kill as many as you can" is being replaced by a conservation ethic among older and younger hunters alike. One leading swamp no longer targets American Golden-Plover and those hunters who maintain swamps year-round provide vital habitat for all shorebirds and other waterbirds.

Communication and cooperation between conservationists and local hunters has potential for significant returns in the survival prospects of shorebirds. Additional refuges for shorebirds and the establishment and adherence to bag limits on species of concern would ensure that Barbados earns a reputation as a haven for passage shorebirds rather than be discredited with notoriety as one of the places where shorebirds are shot. Towards this end, some of the hunters must be commended for starting to release data to BirdLife International for analysis by the Canadian Wildlife Service. This signals a most welcome locally driven change from unexamined resource consumption to data-informed resource conservation. In the long term, this transparent alliance will benefit all. Not least, the magnificent flights of shorebirds.



Hatch-year Black-crowned Night-Herons *Photo: Richard Roach*



Shorebirds feeding at Woodbourne Shorebird Refuge *Photo: Richard Roach*



Black-bellied Whistling-Ducks with Glossy Ibis in 'back swamp'.
Photo: Richard Roach



Red Knot is a species of conservation concern. *Photo: Andre Williams*



Snowy Egret in flight
Photo: Richard Roach

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Table 1
Shorebirds Observed at WSR, May 1, 2009 – November, 2009

Sothorn Lapwing *Vanellus chilensis*
 Black-bellied Plover *Pluvialis squatarola*
 American Golden-Plover *Pluvialis dominica*
 Semipalmated Plover *Charadrius semipalmatus*
 Spotted Sandpiper *Actitis macularia*
 Solitary Sandpiper *Tringa solitaria*
 Greater Yellowlegs *Tringa melanoleuca*
 Lesser Yellowlegs *Tringa flavipes*
 Ruddy Turnstone *Arenaria interpres*
 Red Knot *Calidris canutus*
 Semipalmated Sandpiper *Calidris pusilla*
 Western Sandpiper *Calidris mauri*
 Least Sandpiper *Calidris minutilla*
 White-rumped Sandpiper *Calidris fuscicollis*
 Pectoral Sandpiper *Calidris melanotos*
 Stilt Sandpiper *Calidris himantopus*
 Ruff *Philomachus pugnax*
 Short-billed Dowitcher *Limnodromus griseus*
 Long-billed Dowitcher *Limnodromus scolopaceus*
 Wilson's Snipe *Gallinago delicata*

Table 2
Waterbirds Observed at WSR, May 1, 2009 – November, 2009

Black-bellied Whistling-Duck *Dendrocygna autumnalis*
 Blue-winged Teal *Anas discors*
 Masked Duck *Nomonyx dominicus*
 Great Blue Heron *Ardea herodias*
 Great Egret *Ardea alba*
 Little Egret *Egretta garzetta*
 Snowy Egret *Egretta thula*
 Little Blue Heron *Egretta caerulea*
 Cattle Egret *Bubulcus ibis*
 Green Heron *Butorides virescens*
 Black-crowned Night-Heron *Nycticorax nycticorax*
 Glossy Ibis *Plegadis falcinellus*
 Eurasian Spoonbill *Platalea leucorodia*
 Osprey *Pandion haliaetus*
 Sora *Porzana carolina*
 Common Moorhen *Gallinula chloropus*

Laughing Gull *Larus atricilla*
 Herring Gull *Larus argentatus*
 Lesser Black-backed Gull *Larus fuscus*
 Gull-billed Tern *Sterna nilotica*
 Belted Kingfisher *Ceryle alcyon*

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