

Declining numbers of Lesser Yellowlegs *Tringa flavipes* in Suriname

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Throughout much of the year, the muddy coast of Suriname, north-eastern South America, supports important populations of North American shorebirds (Morrison & Ross 1989, Ottema & Spaans 2008, Spaans 1978). During the 1970s, the Lesser Yellowlegs *Tringa flavipes* was one of the commonest shorebirds on the tidal mudflats and coastal lagoons of Suriname (Spaans 1978), but over the last 20 years has shown a major decline (Ottema & Spaans 2008), as is the case for several other shorebird species using the West Atlantic and Continental Flyways (Morrison *et al.* 2001, 2006). This note documents the decline of the Lesser Yellowlegs in Suriname.

During the 1970s and 1980s, Lesser Yellowlegs were at least twice as numerous as Greater Yellowlegs *Tringa melanoleuca* based on counts at two points on the Suriname coast (Spaans 1978). During counts conducted at Weg naar Zee, 10 km north-west of Paramaribo, during 2000–2005, OHO found both species to be equally numerous suggesting that Lesser Yellowlegs had declined compared with Greater Yellowlegs.

There is no evidence of any change in the non-breeding season population of Greater Yellowlegs in Suriname when counts from the 1970s and 1980s are compared with those from more recent years. However, O. Tostain (pers. comm.) has reported a decline in numbers of Greater Yellowlegs wintering in French Guiana.

In 2007, very few Lesser Yellowlegs were seen in Suriname by A.L. Spaans (pers. comm.) and OHO. For that reason, we decided to conduct five counts at Weg naar Zee (5°54.294'N, 55°13.557'W) in the 2008–2009 non-breeding season using the same methods as were used in surveys carried out during 2002–2005.

From the most northerly point of a cape, we counted all Greater and Lesser Yellowlegs present on a mudflat from 800 m to the west to 500 m to the east (that is to the end of the mudflat). We used a 20× Leica telescope. While OHO counted, SR watched for movements so that double counting or missing birds could be avoided. We started the counts three hours after high tide, when about one quarter of the total mudflat was exposed. Almost all counts started between

08h00 and 09h00. Some started later but always before 10h00.

The results of the survey show a decline in the numbers of Lesser Yellowlegs using the study site of about 80% over the six years, but no change in the numbers of Greater Yellowlegs (Fig. 1). For Lesser Yellowlegs there is a significant between-year difference in the median count (Kruskal–Wallis Test, $H = 11.50$, $p < 0.01$), but no such difference for Greater Yellowlegs (Kruskal–Wallis Test, $H = 20.7$, $p = 0.557$).

Other observations indicate that the decline in numbers of Lesser Yellowlegs we recorded at Weg naar Zee, and their relationship with those of Greater Yellowlegs, is likely to be representative of the whole coast of Suriname. This is supported by an aerial survey of the coast of Suriname by R.I.G. Morrison and R.K. Ross in December 2008 (pers. comm.), by observations by A.L. Spaans (pers. comm.) and by four counts conducted by OHO near the mouth of the Warapa Creek about 50 km east of Weg naar Zee on 7 Nov 2008 (50 Greater and 2 Lesser Yellowlegs), 18 Nov 2008 (190 Greater, 15 Lesser), 6 Dec 2008 (130 Greater, 17 Lesser) and 7 Dec 2008 (237 Greater, 28 Lesser).

Aerial surveys in the mid-1980s showed that >70% of Greater and Lesser Yellowlegs wintering on the South American coast do so in Suriname (Morrison & Ross 1989). Therefore, although we accept that our counts are only small samples compared with the latest Lesser Yellowlegs world population estimate of 400,000 (Morrison *et al.* 2006), it is conceivable that the whole population has declined by around three-quarters over the past six years. If this is true, the species could become extinct within two or three decades.

Possibly the decline of Lesser Yellowlegs in Suriname has a local cause and the population as a whole has not been affected. However, we do not believe that this is the case. Killing shorebirds for human consumption (which is illegal) does take place, but there is no evidence that this has increased over the past six years. An inquiry conducted by the Suriname government's Nature Conservation Division and STINASU, the Foundation for Nature Conservation in Suriname, in 2006 showed that the number of waterbirds of all species poached in the coastal area amounts to several tens of thousands per

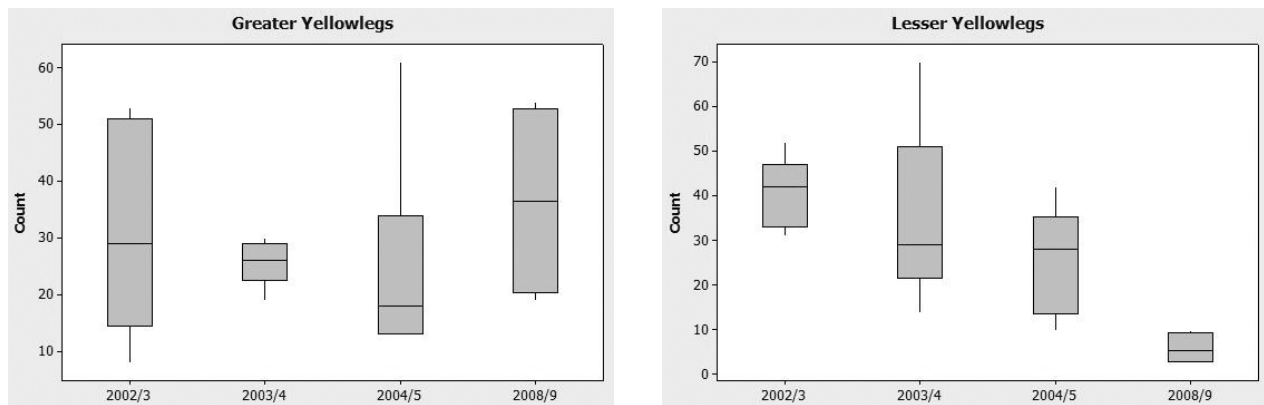


Fig. 1. Numbers of Greater and Lesser Yellowlegs counted at Weg naar Zee, Suriname. The vertical lines show the full range of counts during September to February, the boxes the inter-quartile range (the middle 50% of the data), and the horizontal lines the median count for each winter.

year (Ottema & Spaans 2008). We feel that this is not enough to account for the recent major decline in Lesser Yellowlegs, though we do not know how many birds are poached in other countries. If poaching is the main reason, Greater Yellowlegs should show a similar decline, but it does not. Greater Yellowlegs are less easy to approach (and presumably shoot) than Lesser Yellowlegs, but we do not feel it likely that they can avoid poaching altogether.

We recommend urgent steps to determine the population trends of Lesser Yellowlegs wherever they occur and, if it is established that the decline we have found in Suriname is widespread, we urge immediate action to discover the cause.

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