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**Extra-egg clutches and interspecific egg-dumping of the Roseate Tern (*Sterna dougallii*) in the West Indies.**—The usual clutch size reported for Roseate Tern (*Sterna dougallii*) is one or two eggs (Bent 1921), but instances of three and four eggs per nest have been noted in both tropical and temperate zone populations (Bond 1941, Nichols 1943, Nisbet 1978, 1981). Bent (1921) stated that Common Tern's (*S. hirundo*) clutch size is usually two or three eggs, although indiscriminant dropping of eggs by birds unable to reach their nest (egg-laying accidents) has led to clutches of up to six eggs. These observations demonstrate intraspecific brood parasitism as found among other colonial nesting birds (e.g. Brown 1984), but accounts of egg-dumping or interspecific egg-laying behavior for Roseate Terns are not known.

Roseate Tern colonies in the U. S. Virgin Islands are among the largest known in the Western Hemisphere (Nisbet 1980, Halewyn and Norton 1984). From 1980 to 1986, I censused Roseate colonies on the eastern Puerto Rico Bank from Culebra, Puerto Rico to St. Thomas, U. S. Virgin Islands, to Anegada, British Virgin Islands, and counted up to 1,670 nests and eggs in a season. Mean ( $\pm$  s.d.) clutch size of Roseate Terns (Figure 1)



Figure 1. Primary Roseate Tern edge-type nesting habitat on offshore cays of the Virgin Islands archipelago. Note the close proximity of vegetation, although eggs may rest directly on hard substrate of volcanic origin or rock-flake soil.

Table 1. Mensural characteristics of Roseate Tern (*Sterna dougallii*) eggs in the U. S. Virgin Islands.<sup>1</sup>

Date	Variable	A-egg	B-egg	All eggs
May 1978 <sup>2</sup>	Length	43.3 ± 1.45	41.8 ± 1.12	
	Width	30.0 ± 0.79	29.7 ± 0.92	
May 1980 <sup>3</sup>	Length			42.2 ± 1.14
	Width			29.6 ± 1.10
May 1984 <sup>4</sup>	Length	42.7 ± 1.43	41.3 ± 1.29	
	Width	30.0 ± 0.88	29.8 ± 0.87	
May 1985 <sup>5</sup>	Length	43.1 ± 1.69	41.7 ± 1.37	
	Width	30.1 ± 0.68	30.0 ± 0.49	

<sup>1</sup>Values represent mean ± 1 s.d.

<sup>2</sup>N= 24 eggs.

<sup>3</sup>N= 10 eggs.

<sup>4</sup>N= 24 eggs.

<sup>5</sup>N= 20 eggs.

from 1980 to 1985 was  $1.49 \pm 0.50$  ( $N = 6,969$ ), whereas in Massachusetts the 1970-1971 mean was  $1.74$  ( $N = 234$ ) (Nisbet and Drury 1972), 14% larger. Table 1 offers mean egg sizes of Roseates in four breeding seasons from 1978 to 1985. Three and four-egg clutches of Roseate Terns in the Virgin Islands during this period were not common (11 of 1,455 nests in 1985 or < 1.0%).

Three and four-egg Roseate clutches also may be the result of females dumping eggs in existing nests or scrapes. For example, in June 1981, I found an active Zenaida Dove (*Zenaida aurita*) nest in a cliff-wall at the periphery of a Roseate Tern colony at Shark Island, St. Thomas, containing one dove egg and one tern egg. Only a few days earlier, a moderately large group of Roseates (400+ pairs) had been poached (Norton 1981) at nearby Dog Island, and apparently re-nested at Shark Island within a few days illustrating coalescence or group adherence (Austin 1951) with a larger group. The Shark Island colony increased 41% from 690 nests on 2 June to 989 nests on 9 June; at the same time, its nesting density increased from 3.3 nests/m<sup>2</sup> to 4.4 nests/m<sup>2</sup>. Another instance of interspecific egg-dumping occurred at Kalkun Cay, St. Thomas, in late May 1985 where nesting density had reached 4.0 nests/m<sup>2</sup>. There a Roseate Tern egg was found in an active Bridled Tern (*S. anaethetus*) scrape, again at the edge of the main nesting group. Zenaida Doves and Bridled Terns commence nesting in late April to early May, whereas Roseate Terns begin in mid-May to early June in the Virgin Islands (pers. obs.), which would eliminate the possibility of the reverse situation of the dove or Bridled Tern laying in a Roseate's nest.

It seems that on occasion, female Roseate Terns may dump eggs in adjacent or similar appearing nests of interspecifics or intraspecifics when optimal habitat within the colony is limited (Figure 2). The low incidence (< 1.0%) of double-sized clutches (3-4 eggs) of Roseate Terns as well as interspecific egg-dumping reported here suggests that the event is nonetheless rare. Bond (1984) suggested that three-egg clutches in Roseate Tern colonies in the West Indies pertain to Common Terns, but I did not encounter Common Terns in my visits to a colony of Roseate Terns in the Virgin Islands where three or four-egg clutches have been found. Colonies of low nesting density (< 0.02 nests/m<sup>2</sup>) which have three or four-egg sets warrant further scrutiny. Large Roseate colonies, of any derivation may have a consistent, albeit low, element of interspecific and intraspecific egg-dumping brought upon by limited nesting area.



Figure 2. Suboptimal Roseate Tern open-site nesting habitat on offshore cays of the Virgin Islands archipelago. Exposed breeding habitat ranges from unvegetated ledge to sea level coral rubble.

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**Records of the panther in Highlands County, Florida.**—Occurrence of the panther (*Felis concolor*) was documented at two localities in Highlands County in south-central Florida in August and October 1987. On 12 August, tracks and an associated scat were found on the Archbold Biological Station (ABS) 12 km S of Lake Placid (Sec. 30, T28S, R30E). The tracks were discovered at 2000 h EST in an area of interspersed scrubby flatwoods, typical flatwoods, and seasonal ponds (see Abrahamson et al. 1984 for a description of these habitats). The scat was still warm and had a strong odor when found, indicating that the cat had passed by only a few minutes before. Light rain was occurring at the time, and it had rained hard several hours earlier. The tracks crossed a narrow 4-wheel drive sand road and were visible for a short distance on both sides of the road. The scat was deposited in the road on top of a mound of sand pushed up by vehicle tires. Measurements (mm) of heel pad length and width, respectively, of six tracks were: 45x60, 36x55, 40x44, 40x55, 44x55, 52x55 (means = 43x54). The fresh scat was 905 mm in length and 30 mm in maximum diameter. It was composed of hair and bone fragments of hog (*Sus scrofa*).

On 13 October, panther tracks were discovered by Robert Scarborough and Dale Durrance on the Scarborough Ranch 13 km SE of Lake Placid in an area about 1.6 km N of S.R. 70 and 1.6 km E of S.R. 29 (NE corner Sec. 36, T37S, R30E, SW corner Sec. 30, T37S, R31E). The site is approximately 13 km NE of the ABS locality. The tracks were found about 1400 h. Some were superimposed on vehicle tracks that had been made about 1600 h the previous day, indicating that they were less than 24 h old. Tracks, presumably of the same individual, were observed in four locations within an area of about 11 ha and separated by a maximum distance of approximately 1 km. One set of more than 100 tracks extended about 0.5 km along a sand road bordered by dense cabbage palm (*Sabal palmetto*) and live oak (*Quercus virginiana*) hammock, swamp forest, and improved pasture. A second set occurred on another road in similar habitats about 0.4 km away. Several tracks were located in a cabbage palm-live oak hammock with sparse understory and almost no ground cover. At the fourth site, in open pasture 0.3 km from the hammock, about 25 tracks occurred along a narrow, sandy cow path on a low berm between two drainage ditches. Heel pad length and width of seven tracks from three of the four sites were: 42x64, 50x64, 47x57, 45x55, 40x55, 45x52, 45x50 (means = 45x57).

The size of the tracks on the ABS and Scarborough Ranch indicates that the animal in each case was probably a male, as the heel pad of adult males is >50 mm in width (D. S.