

Invertebrates

National Park Service Research Report

Park Name: Padre Island National Seashore
Activity: Research
Subject: Entomology

Report Year: 1997

Project Title: Robber flies of Padre Island National Seashore

Investigator(s): Dr. Riley Nelson
Div. Biological Sciences
University of Texas
Austin, TX 78712

Phone: 512-471-4882
Fax : 512-471-4969
Email: capnia@uts.cc.utexas.edu

Not in
MBB
entered
5/29/01
SLG

Coinvestigator:

Objective: My objective is to collect robber flies (Diptera: Asilidae) at Malaquite Beach and Bird Island Basin to determine if historically recorded species are still present. If *Proctacanthella robusta* is still present, then I will photograph it and retain voucher specimens for the museum at the Brackenridge Field Laboratory of the University of Texas at Austin.

Findings: I collected two species of robber flies under the conditions of this permit.

✓ I collected *Laphystia opaca* on 11 July 1997 at Malaquite Beach near the campground. This species was common and abundant on both the upper beach near the dunes and on the wet sand of the lower beach. I took no photographs of this species.

I collected *Proctacanthella robusta* from Bird Island Basin on 12 July 1997. This species was common and abundant on dry mud flats near the concession stand. It was particularly common along the margin of the flats near sparse stands of chenopodiaceous plants (*Salicornia?* sp.). I photographed this species and include a copy of a photograph with this report.

I also visited Malaquite Beach on 31 August 1997, but did not see or collect any robber flies. I collected a different *Proctacanthella* species, *cacopiloga*, from the Flour Bluff area of Corpus Christi on 31 August 1997. I did not visit Bird Island Basin on this date, but it would be good to know if *Proctacanthella robusta* occurs there this late in the season.

In summary, *Proctacanthella robusta* is known from the holotype male specimen, reported by Bromley (1951) to be in the collection at Ohio State

National Park Service
Research Report

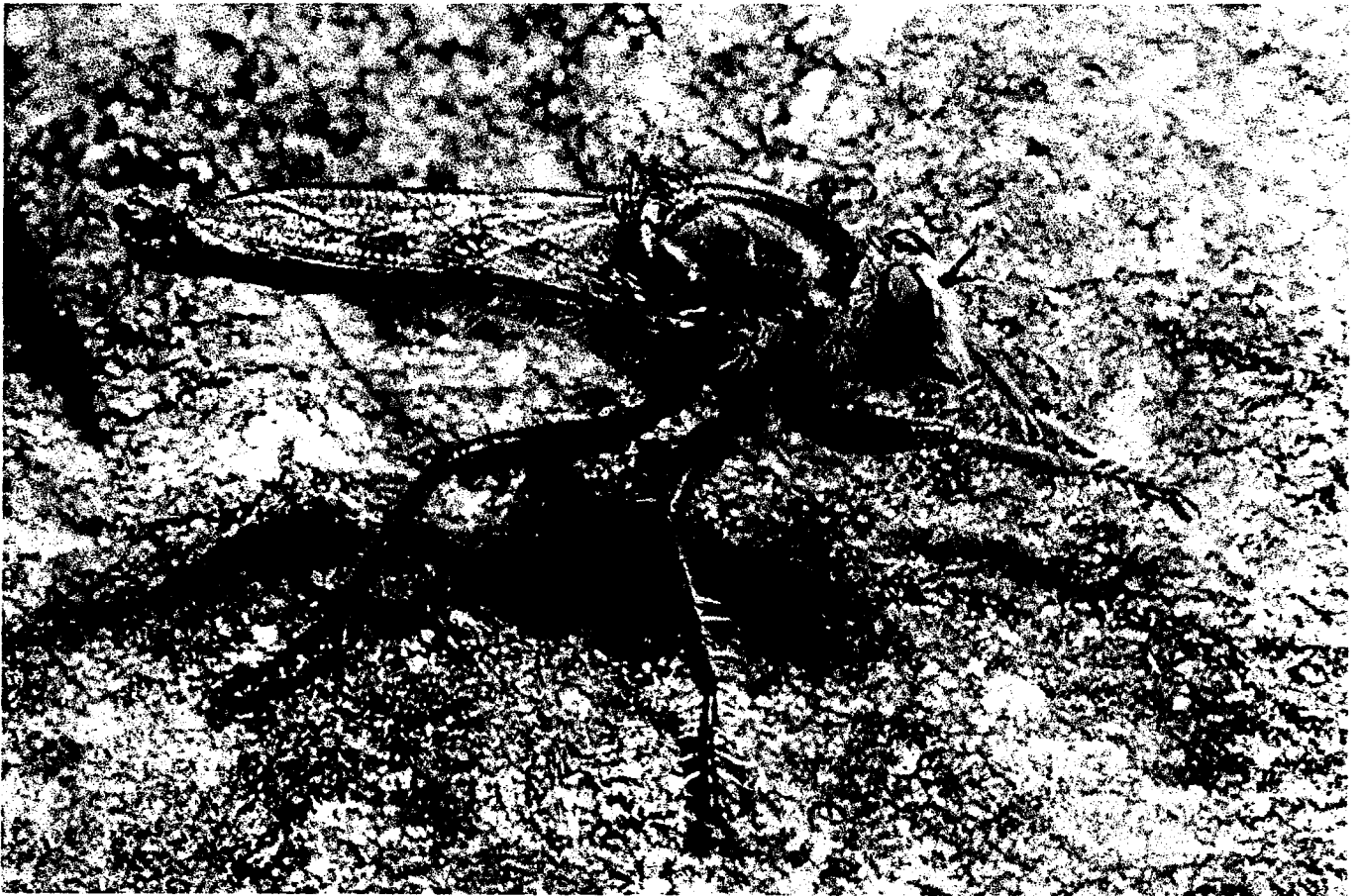
University in Columbus, Ohio. This specimen was collected on 24 July 1925 at Port Lavaca. Only four additional specimens are recorded (Wilcox 1965). In this publication he reported a female from Padre Island, San Patricio Co., Texas collected on 7 July 1952 (in the University of California at Davis collection) as well as a male and two females ambiguously reported as having the "same data" or "Freeport, Texas, June 14, 1956". With my efforts we now know that it is common at Bird Island Basin during the midsummer. I have thus extended the known range of this species to the southwest by about 100 miles. Other similar habitats on the estuary side of Padre Island, and other islands in the coastal strand should be investigated to see exactly how narrow the range of this interesting species is, particularly since a near relative, *P. cacopiloga* is known from the nearby mainland.

Reports Produced: This represents the sole report for the use of collecting permit PAIS-97-006, as of 1 December 1997. Any further requests for information can be forwarded to me at the address listed above.

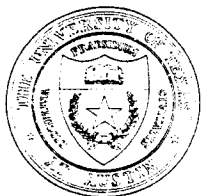
Specimens of all species mentioned in this report are deposited in the research collection of the Brackenridge Field Laboratory of the University of Texas at Austin, Austin, TX 78712. I am the curator of this collection, all requests for examining these specimens may be directed to my address.

Bibliography: Bromley, S. W. 1951. Asilid notes (Diptera), with descriptions of thirty-two new species. American Museum Novitates. 1532: 1-36.

Wilcox, J. 1965. *Proctacanthella* Bromley (Diptera: Asilidae). J. Kansas Entomol. Soc. 38: 106-110.



Prosciantella robusta Bowley
Red Island Russia
2 July 1947
C. R. Nelson



DIVISION OF BIOLOGICAL SCIENCES
THE UNIVERSITY OF TEXAS AT AUSTIN

PAI 122 • Austin, Texas 78712-1187 • (512) 471-4882 • Fax: (512) 471-4969

1 December 1997

Darrell L. Echols
National Park Service
Padre Island National Seashore
9405 South Padre Island Drive
Corpus Christi, TX 78418

Dear Darrell:

I am enclosing my report for collecting activities under permit PAIS-97-006, Robber Flies of Padre Island National Seashore in the format of a diskette with two files (one for you database, I hope! called IARDATA.ZIP and another PADRE.WP in WP 5.2) and two hardcopies. I had some copying problems using the park service software so the most complete versions are the PADRE.WP and hardcopies. I am also enclosing a photograph of *Proctacanthella robusta* Bromley for your files. If any funding for such an activity becomes available please let me know. Thank you for your help. I hope to be able to expand the collecting to do a complete survey of Asilidae (and Dragonflies!) in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Riley Nelson", with a long, sweeping horizontal line extending to the right.

C. Riley Nelson, Ph.D.
capnia@uts.cc.utexas.edu