

## LETHAL MOBBING OF A LAUGHING GULL BY LEAST TERNS

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At 7:30 A.M. on 31 May 1992, we arrived at the largest Least Tern (*Sterna antillarum*) colony (approximately 2000 nests) on the public beach in Gulfport, Harrison County, Mississippi. Immediately we saw and heard six to eight Least Terns mobbing an adult Laughing Gull (*Larus atricilla*) about 40 m from us. The terns dove repeatedly at it, defecating on it as they dove. Several times we saw terns physically strike the gull. As we watched, the gull seemed to crouch, listing slightly to one side, and the intensity of the terns' attack seemed to increase. Within about 10 minutes of our arrival we walked to the gull and found it alive, covered with tern excrement, and seemingly paralyzed from the neck down. Next to the gull was a Least Tern nest with two partially eaten Least Tern eggs. Development of the embryos had only recently begun. We took the Laughing Gull to the College of Veterinary Medicine at Mississippi State University, where it died without regaining motor control.

Except for its intensity and the immobilization of the Laughing Gull, the anti-predator behavior we observed was consistent with that previously described for the Little Tern (*S. albifrons*; Dunn 1985) and for the Least Tern (Hardy 1957). Least Terns at this colony site are known to be particularly aggressive in their defense of nest sites against potential predators. Jackson et al. (1982) noted that birds in the mainland Mississippi colonies more vigorously defended their colonies against human intrusion than did terns in offshore island colonies. They were often struck by defensive terns in the mainland colonies and related the behavior to the greater frequency of human disturbance at the mainland colonies. The fact that the gull was immobilized and ultimately died was almost certainly the result of a fortuitous, forceful blow to the head.

This Gulfport colony is apparently the largest colony in the world and, through beach management, it has been maintained at the same site since 1974 (Jackson 1976, Jackson and Jackson 1985). The size and stability of the colony are unusual and may have some negative consequences for the birds. Under natural conditions, Least Terns are an early successional species and can be expected to shift nest sites as the habitat changes through vegetative succession. Such changes may minimize build-up of predator populations at colonies, since even long-lived predators would have to search anew each year for the colony. With the colony site stabilized, such as in Gulfport, and with such a large concentration of eggs and chicks as potential food, long-lived predators/scavengers such as Laughing Gulls might be expected to return year after year and perhaps pose a more serious threat than they would at smaller colonies with varying sites. The limiting factors for such predators/scavengers are the food supply outside of the tern nesting season and the availability of their own nesting habitat. Laughing Gulls have very rarely nested in Mississippi (Jackson et al. 1979), and the closest large colonies are in the Chandeleur Islands of Louisiana, more than 30 miles south of Gulfport (Portnoy 1977).

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#### Literature Cited

- Dunn, E.K. 1985. Social pattern and behavior. Pp. 125-128, in Handbook of the Birds of Europe, the Middle East and North Africa (S. Cramp, ed.). Oxford University Press, New York.
- Hardy, J.W. 1957. The Least Tern in the Mississippi valley. Publ. Mus. Michigan State University Biol. Ser. 1(1):1-60.
- Jackson, J.A. 1976. Some aspects of the nesting ecology of Least Terns on the Mississippi Gulf coast. Mississippi Kite 6:25-35.

- Jackson, J.A., and Bette J.S. Jackson. 1985. Status, dispersion, and population changes of the Least Tern in coastal Mississippi. *Colonial Waterbirds* 8:54-62.
- Jackson, J.A., B.E. Rowe, M.S. Hetrick, and B.J. Schardien. 1982. Site-specific nest defense behavior of Black Skimmers and Least Terns. *Condor* 84:120.
- Jackson, J.A., B.J. Schardien, and C.D. Cooley. 1979. Dispersion, phenology, and population sizes of nesting colonial seabirds on the Mississippi Gulf coast. *Proc. Colonial Waterbird Group* 3:145-155.
- Portnoy, J.W. 1977. Nesting colonies of seabirds and wading birds -- coastal Louisiana, Mississippi, and Alabama. U.S. Fish and Wildlife Service Biol. Serv. Prog. FWS/OBS-77/07. 126 pp.