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## AN OBSERVATION OF HUMAN-INDUCED ADOPTION IN PIPING PLOVERS

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**Abstract.**—A pair of Piping Plovers (*Charadrius melodus*) successfully fledged an alien Piping Plover chick along with their four young in July 1990 near West Haven, Connecticut. The alien chick was introduced into the foster Piping Plover family group after it was hatched by a pair of Least Terns (*Sterna antillarum*). The Least Terns had taken over a Piping Plover nest containing three eggs and laid two eggs of their own. Two of the three Piping Plover eggs hatched; one chick, however, was not found. Both Least Tern eggs hatched; one chick was found dead, the other's fate was unknown. This observation suggests that Piping Plovers can be induced to adopt chicks not their own, and that Least Terns can accidentally hatch eggs of another species.

### ADOPCIÓN DE PICHONES EN *CHARADRIUS MELODUS* INDUCIDO POR HUMANOS

**Sinopsis.**—En julio de 1990, cerca de West Haven, Connecticut, una pareja de playeros (*Charadrius melodus*) criaron sus cuatro pichones y a otro polluelo que les fue colocado en su nido. El polluelo ajeno, fue colocado en el nido de los playeros luego de que este fuera empollado por una pareja de gaviotas (*Sterna fuscata*). Las gaviotas, invadieron un nido de playeros que contenía tres huevos, y pusieron dos huevos propios. Dos de los huevos de playero eclosionaron; uno de los polluelos sin embargo no se encontró. Ambos huevos de las gaviotas eclosionaron; uno de los polluelos fue encontrado muerto, y desconocemos el paradero del otro. Estas observaciones sugieren que se puede inducir a parejas de *C. melodus* a adoptar pichones, y que las gaviotas mencionadas pueden ocasionalmente incubar hasta el eclosionamiento huevos de otras especies.

A Piping Plover (*Charadrius melodus*) nest with one egg was found on 23 May 1990, at Sandy Point Beach in West Haven, Connecticut. Eight days later, the nest contained three Piping Plover eggs, two Least Tern (*Sterna antillarum*) eggs, and was being incubated by Least Terns. We

do not know whether the Piping Plovers abandoned the nest or the Least Terns chased them away. The nest was located within a Least Tern colony of >200 pairs. Seven other pairs of Piping Plovers also were nesting within the approximate 1.8-ha area.

On 29 June, a Piping Plover egg hatched in the Least Tern nest. The Least Terns had removed the egg shell and were incubating the chick and remaining eggs. The following day, the Piping Plover chick was in the nest, but when we approached, it ran approximately 0.5 m and squatted in the sand. Believing that without proper parental care, the chick would not survive, we introduced the chick into a nearby Piping Plover family group. The foster Piping Plover pair had nested within 9 m of the Least Tern nest and hatched four eggs on 28 June. At our approach, the foster Piping Plover family group retreated to a nearby grassy area. After releasing the chick  $\leq 11$  m from the group, we observed the birds from 27 m for 5–10 min. The alien chick immediately squatted in the sand and a few seconds later ran a short distance and pecked twice at the ground. One adult left the family group, approached within 0.3 m of the chick several times, and exhibited no aggression toward the chick. While one adult stayed with the four young, the second adult remained in close proximity to the alien chick.

On at least four occasions, we observed all five young Piping Plovers and both adults together as a group. None of the chicks were observed being brooded, but at our approach, all the young were defended by both adults through distraction displays. No aggressive behavior toward the alien chick by the adults or young was observed. The five chicks and both adults remained together until the young were observed flying on 25 July.

The remaining four eggs in the Least Tern nest were intact on 30 June, but on 3 July, only one Piping Plover egg remained in the nest. The nest did not appear depredated. A dead Least Tern chick was found within 0.3 m of the nest, but the fates of the second Piping Plover chick and Least Tern chick were unknown.

The mean incubation period for Piping Plovers is 27 d after the last egg is laid, ranging from 22 to 30 d (Gaines and Ryan 1988, Harrison 1984, Wilcox 1959). The two Piping Plover eggs that hatched in the Least Tern nest had an incubation period of 29–33 d. The mean incubation period for Least Terns is 19–22 d after the final egg is laid (Harrison 1984). The two Least Tern eggs that hatched from this nest had an incubation period of 31–34 d. A factor in these increased incubation periods may be the inability of Least Terns to cover and incubate adequately five eggs.

This report suggests that piping plovers can be induced to adopt chicks not their own, and that least terns can accidentally hatch eggs of another species.

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- HARRISON, C. 1984. A field guide to the nests, eggs and nestlings of North American birds. Collins Publishers, Don Mills, Ontario, Canada. 416 pp.
- WILCOX, L. 1959. A twenty year study of the piping plover. *Auk* 76:129-152.

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## MEETINGS OF INTEREST

**Fifth Alaska Bird Conference and Workshop**, Anchorage, Alaska, 19-22 November 1991.

For information write to: Robert E. Gill, Jr., U.S. Fish and Wildlife Service, 1011 E. Tudor Rd., Anchorage, AK 99507.

**Seventh North American Arctic Goose Conference**, California Maritime Academy, Vallejo, California, 1-12 January 1992.

For information contact: Bob McLandress, Co-chair, California Waterfowl Association, 3840 Rosin Ct., Suite 200, Sacramento, CA 95834.

**Pacific Seabird Group Annual Meeting**, Oregon Institute of Marine Biology, University of Oregon, Charleston, Oregon, 15-19 January 1992.

For information write to: Palmer Sekora, U.S. Fish and Wildlife Service, Finley Wildlife Refuge, 26208 Finley Refuge Rd., Corvallis, OR 97333.

**Missouri River Piping Plover and Least Tern Symposium/Workshop**, Lincoln, Nebraska, 4-6 February 1992.

For information contact: Kenneth F. Higgins, P.O. Box 2206, South Dakota State University, Brookings, SD 57007.

**Eastern Bird Banding Association Annual Meeting**, Keller Conference Center, Penn State University, State College, Pennsylvania, 27-29 March 1992.

For information call: Janet Shaffer, 814-356-3553.