

**EVASIVE TACTICS EMPLOYED BY SPOTTED SANDPIPER  
(*Actitis macularius*) IN RESPONSE TO PREDATION THREAT**

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*Abstract*—Herewith, I report an evasive behavior by Spotted Sandpipers (*Actitis macularius*) pursued by a Peregrine Falcon (*Falco peregrinus*).

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**OBSERVATION**

On 21 September 2016, while birding the Lake Carl Etling dam and spillway, Black Mesa State Park, Cimarron County, Oklahoma, I witnessed predator avoidance behavior by two Spotted Sandpipers (*Actitis macularius*).

When walking along the dam, I observed two adult Spotted Sandpipers take flight from the shoreline, where they had apparently been foraging, flying out towards the center of the lake giving their characteristic descending *peet weet weet* calls. I was following the two sandpipers with my binoculars when they suddenly shifted course and flew directly into the water (entering at a low angle), disappearing below the surface about 50 m from the shoreline. Stunned and confused, I lowered my binoculars, to see an adult Peregrine Falcon (*Falco peregrinus*), of whose presence I had been unaware, hovering about 10 m above the water at the approximate location where the sandpipers entered the lake. Approximately three seconds later, the two sandpipers popped up out of the water. When the Peregrine Falcon made a stoop for the sandpipers, they dove below the surface of the water again. The Peregrine Falcon then flew off down the shoreline and out of view. When the sandpipers emerged from the water, and with the threat gone, they flew back to the shoreline. The depth of the lake where the sandpipers entered, and the depth that the sandpipers dove, are not known.

## DISCUSSION

A literature review revealed reports of swimming and diving in downy young and adult Spotted Sandpipers (Jewel 1915, Sutton 1925, Bent 1929), and by adults of the closely related Common Sandpiper (*Actitis hypoleucos*) of Eurasia (Dougall 2002, Norman 2002, and Yalden 2002). Stone (1925) reported an attack on a Spotted Sandpiper by a Merlin (*Falco columbarius*) in which the sandpiper was struck and knocked into a pond. The sandpiper dove instantly as the falcon passed. The sandpiper came to the surface, rested a minute, and flew off. Kelso (1926) provided a similar account in which a Merlin dove at a Spotted Sandpiper while it was flying over open water, the sandpiper immediately alighted on the water, and repeatedly dove underwater as the falcon tried to capture it. After the falcon flew off, the sandpiper rose to the surface and flew to the shore. This predation avoidance strategy has also been reported in an account of a Spotted Sandpiper diving to escape capture by a Cooper's Hawk (*Accipiter cooperii*; Martin and Atkeson 1958). Spotted Sandpipers have also been observed employing diving behavior to avoid mobbing by Common Grackle (*Quiscalus quiscula*; Pickett et al. 1988), Red-winged Blackbird (*Agelaius phoeniceus*; Watson 1990), and Eastern Kingbird (*Tyrannus tyrannus*; Murie, 1934). Willis (1994) hypothesized that *Actitis* sandpipers have adapted their characteristic flight style of flying low over the water with rapid, shallow wing beats, and their adept diving behavior so that can quickly avoid predators and exploit habitat not preferred by other shorebirds, such as water with heavily wooded shorelines.

Reports of swimming and diving behavior by chicks and adults of numerous other shorebirds species can also be found in the literature. Kelso (1926) reported diving behavior in Common Redshank (*Tringa totanus*), Greater Yellowlegs (*Tringa melanoleuca*), and Whimbrel (*Numenius phaeopus*). Other species reported to exhibit diving include: Eurasian Oystercatcher (*Haematopus ostralegus*; Minton 2001; Heg 2002), African Black Oystercatcher chicks (*Haematopus bachmanii*; Calf 2002) and Solitary Sandpiper (*Tringa solitaria*; Beyersbergen, 2002).

This is the first documented account in which Spotted Sandpipers in Oklahoma have employed such a strategy to avoid predation.

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## LITERATURE CITED

- Bent, A.C. 1929. *Actitis macularia*: Spotted Sandpiper. In Life Histories of North American Shore Birds, Part II. Smithsonian Institution U.S. National Museum Bulletin 146:78-97.
- Beyersbergen, G. 2002. Waders Diving and Swimming Underwater as Means of Escape: Editor's Note. Wader Study Group Bulletin 97:51.
- Calf, K.M. 2002. African Black Oystercatcher Chicks Dive to Escape Danger. Wader Study Group Bulletin 98:46.
- Dougall, T. 2002. Common Sandpipers also Dive to Escape Danger: in Scotland. Wader Study Group Bulletin 97:51-52.
- Jewel, L.L. 1915. The Diving Instinct of Shore-birds. Auk 32:227.
- Heg, D. 2002. Waders Diving and Swimming Underwater as Means of Escape: Editor's Note. Wader Study Group Bulletin 97:51.
- Kelso, J.E.H. 1926. Diving and Swimming Activities Displayed by Limicolae. Auk 43:92-93.
- Martin, L.M. and T. Z. Atkeson. 1958. Escape Diving by a Spotted Sandpiper. Wilson Bulletin 70:281.
- Minton, C. 2001. Waders Diving and Swimming Underwater as Means of Escape. Wader Study Group Bulletin 96:86.
- Murie, A. 1934. Spotted Sandpiper Avoids Eastern Kingbird by Diving. Auk 51:231.
- Norman, D. 2002. Common Sandpiper *Actitis hypoleucos* Attempting to Evade Capture by Swimming Underwater. Wader Study Group Bulletin 98:48.
- Pickett, P.E., S.J. Maxson, and L.W. Oring. 1988. Interspecific Interactions of Spotted Sandpipers. Wilson Bulletin 100:297-302.

Stone, W. 1925. Diving of the Spotted Sandpiper. *Auk* 42:581.

Sutton, G. M. 1925. Swimming and Diving Behavior of the Spotted Sandpiper (*Actitis macularius*). *Auk* 42:580-581.

Watson, W. 1990. Red-wing Blackbird Attacks Spotted Sandpiper. *Kingbird* 40:234-235.

Willis, E.O. 1994. Are *Actitis* Sandpipers Inverted Flying Fishes? *Auk* 111:190-191.

Yalden, D. W. 2002. Common Sandpipers also Dive to Escape Danger: in England. *Wader Study Group Bulletin* 97:52.

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