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Abstracts

SHORT COMMUNICATIONS

FORAGING BEHAVIORS OF SURF SCOTERS AND WHITE-WINGED SCOTERS DURING SPAWNING OF PACIFIC HERRING

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Abstract. Winter diets of Surf (*Melanitta perspicillata*) and White-winged Scoters (*M. fusca*) are composed primarily of bivalves. During spawning of Pacific herring (*Clupea pallasii*) in early spring, scoters shift their diets to herring eggs. Using radio-telemetry, we contrasted scoter foraging behaviors between winter and herring spawning periods. Scoters increased their dive durations during herring spawning, likely to maximize the amount of roe consumed per dive; in winter, dives were typically terminated upon clam capture. Scoters spent approximately 50% less time foraging (min underwater hr⁻¹) and decreased their dive rate (dives hr⁻¹) by 70% when feeding on roe. The observed reduction in time spent foraging was presumably caused by the abundance of herring eggs, and thus a reduction in prey search-time. Scoters were able to meet energetic requirements with reduced effort, despite potentially increased demands related to spring fattening. Less time spent foraging may also allow more time for premigratory courtship behaviors.

Key words: *Clupea pallasii*, *herring spawn*, *Melanitta fusca*, *Melanitta perspicillata*, *sea duck*, *Surf Scoter*, *White-winged Scoter*.