
TIMING, DURATION, AND PATHWAYS OF HARLEQUIN DUCK MIGRATION TO PACIFIC MOLTING AND WINTERING AREAS

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The core breeding range for Harlequin Ducks (*Histrionicus histrionicus*) in western North America extends from Alaska, and south through the Yukon, Northwest Territories, and British Columbia. Smaller breeding populations exist in southwestern Alberta, Washington, Oregon, Idaho, Wyoming, and Montana. Each state and province in these areas has identified the Harlequin Duck as a species of conservation priority, given its small and isolated populations, its specific nesting requirements, and changes in abundance or distribution. Conservation objectives for all areas have identified the importance of mapping migration routes that connect breeding sites to Pacific coast molting and wintering locations, as well as determining migration timing, duration, habitat use, and stopover sites. In spring 2016, we captured Harlequin Duck pairs on breeding streams and surgically implanted satellite transmitters in the males and attached geolocators to the leg bands of females. We marked 18 harlequin pairs (Alberta = 10 (minus one female), Montana = 5, Wyoming = 2, Washington = 1). Migration initiation dates varied by breeding areas and occurred from June 3 to July 10. Male migration lasted between 1-17 days and stopovers occurred approximately half-way to the coast and included rivers, mountain streams, and lakes. They arrived at their molting areas between June 5-July 24 and these areas ranged from southeast Alaska to northwestern Washington. The majority (71%) of harlequins departed molt locations to differing winter locations. Efforts will be made to retrieve the geolocators from females in spring 2017 to compare locations between males and females from different devices.