

# Raptor Movements in Inland Western North America: A Synthesis

by S.W. Hoffman

## Abstract

Concentration points for observing migrating raptors in the West have been discovered only within the last decade. Few western sites are known, largely because the migration is widely dispersed and observers are scarce. Eighteen known spring and/or fall concentration points in the west have yielded an average of 5-15 hawks per hour. Isolated, high north-south ridgelines tend to concentrate migrating hawks in fall; spring lookouts have usually been found on foothills or isolated, low ridges. Numerous large breaks in western ridge systems and consistently strong solar heating suggest thermal updrafts may be a more reliable source of lift for migrating raptors in the west. Fall movements in the Wellsville Mountains of northern Utah, 1977-1979, were greatest from 10 September to 15 October, averaging about 10 days earlier than the flight at Hawk Mountain, Pennsylvania. Western autumn migration activity is strongest when southwest winds are blowing and a low-pressure system is approaching, or during periods of warm, fair weather. Daily movement patterns seem to vary substantially from site to site but are most consistent between 1000 and 1600 hours (M.S.T.). The predominant migrants are accipiters (with approximately equal numbers of Sharp-shinned and Cooper's Hawks), Red-tailed Hawks, and American Kestrels. Further study is needed to clarify spring migration patterns and breeding and non-breeding areas for specific populations and to determine raptors' behavioral responses to various physiographic and climatic factors.