

The bird faunas of Canada can not be properly divided by an arbitrary line drawn north and south through the centre of the Dominion, as the breeding birds are largely of typically Eastern Canadian type to the eastern edge of the Rocky mountains. Worthy of note are a number of so-called "Eastern" species which range without change clear across the continent: American bittern (*Botaurus lentiginosus*), Cooper's hawk (*Accipiter cooperi*), sparrow hawk (*Falco sparverius*), killdeer (*Oxyechus vociferus*), spotted sandpiper (*Actitis macularia*), eastern kingbird (*Tyrannus tyrannus*), olive-sided flycatcher (*Nuttallornis mesoleucus*), tree swallow (*Iridoprocne bicolor*), barn swallow (*Hirundo erythrogaster*), cliff swallow (*Petrochelidon albifrons*), cedar waxwing (*Bombycilla cedrorum*), red eyed vireo (*Vireo olivaceus*), and pine siskin (*Spinus pinus*).

Numerous species familiar in the east are represented on the prairies or on the Pacific coast by slightly differentiated subspecies: Harris's (hairy) woodpecker (*Dryobates villosus harrisi*), Batchelder's (downy) woodpecker (*Dryobates pubescens leucurus*), western pileated woodpecker (*Ceophloeus pileatus picinus*), slender-billed nuthatch (*Sitta carolinensis aculeata*), western house wren (*Troglodytes aëdon parkmani*), western winter wren (*Nannus hyemalis pacificus*), western robin (*Turdus migratorius propinquus*), dwarf hermit thrush (*Hylocichla guttata nanus*), willow thrush (*Hylocichla fuscescens salicicola*), Cassin's (blue-headed) vireo (*Vireo gilvus cassini*), western warbling vireo (*Vireo gilvus swainsoni*), lutescent (orange-crowned) warbler (*Vermivora celata lutescens*), Calaveras (Nashville) warbler (*Vermivora ruficapilla ridgwayi*), western yellow-throat (*Geothlypis trichas occidentalis*), long-tailed chat (*Icteria virens longicauda*), pileolated (Wilson's) warbler (*Wilsonia pusilla pileolatus*), western red-winged blackbird (*Agelaius phœniceus* subspecies), pale goldfinch (*Spinus tristis pallidus*), western lark sparrow (*Chondestes grammacus strigatus*), western vesper sparrow (*Pooecetes gramineus confinis*), western chipping sparrow (*Spizella passerina arizonae*), western tree sparrow (*Spizella arborea ochracea*), Gambel's (white-crowned) sparrow (*Zonotrichia leucophrys gambeli*), sooty fox sparrow (*Passerella iliaca fuliginosa*), rusty song sparrow (*Melospiza melodia morphna*), Forbush's sparrow (*Melospiza lincolni gracilis*).

Typical birds of the Pacific coast and rare east of the Coast mountains are: band-tailed pigeon (*Columba fasciata*), Kennicott's screech owl (*Otus asio kennicotti*), coast pigmy owl (*Glaucidium gnoma grinnelli*), black swift (*Nephoecetes niger borealis*), northwestern flicker (*Colaptes cafer cafer*), red-breasted sapsucker (*Sphyrapicus varius ruber*), Steller's jay (*Cyanocitta stelleri*), Oregon chickadee (*Penthestes atricapillus occidentalis*), chestnut-sided chickadee (*Penthestes rufescens*), russet-backed thrush (*Hylocichla ustulata*), black-throated gray warbler (*Dendroica nigrescens*), northwestern redwing (*Agelaius phœniceus caurinus*), Oregon towhee (*Pipilo maculatus oregonus*), northwest crow (*Corvus brachyrhynchos caurinus*).

Waterfowl Flyways of North America.

The perplexing intermixture of the avian faunas of North America is perhaps best illustrated by the migration of the waterfowl. The ducks and geese, of importance for food and sport, have been the object of detailed study by a wider class of people than have most other groups of birds. The comparatively recent development of bird-banding, or "ringing" as it is called in England, has done much to sweep away the mystery which has shrouded the migration of birds since earliest times. Begun in a small way by private naturalists, the project has become of international importance, as many of the birds breed in one country and winter in other countries. Great numbers of birds, as nestlings or taken in traps, have