

Identification Resources for Montana Species

Please send suggested additions or questions to Bryce Maxell at bmaxell@mt.gov (406) 444-3989

*Free resources are highlighted in light green. Smart phone applications are bolded.

General Resources

- [Montana Field Guide](#) – online guide to species and habitats of Montana, organized taxonomically with ability to download PDFs for larger taxonomic groups
- [Map Viewer - Generalized Observations task](#) – general distribution & predicted habitat suitability
- [Species Snapshot](#) – filter out species by area, taxonomic group, and status of interest. Explore species accounts and distribution online or download field guide PDFs
- Posters, presentations, checklists, brochures, keys, and other resources on Montana species
- [Zoological Resources](#)
- [Botanical Resources](#)
- **iNaturalist** - free app available for Apple or Android with identification of species via a device's camera or from photos that are taken
- **Seek by iNaturalist** – free app available for Apple or Android with identification of species via a device's camera. Seek takes many special precautions to protect any user's privacy and was developed to ensure safe use by persons 12 years of age or younger.
- **Related Websites** of potential interest for a variety of botanical and zoological information
- [Botanical](#)
- [Zoological](#)

Vertebrates

- **Fishes of Montana** – free app available for Apple or Android
- [Amphibians and Reptiles of Montana \(Werner et al. 2004\)](#) – book, kindle
- [Mammals of Montana \(Foresman and Badyaev 2012\)](#) – book, kindle
- [Mammal Tracks & Sign \(Elbroch 2019\)](#) – book, kindle
- Bats of Montana: identification and natural history (Bachen et al. 2018) – free PDF
- **Merlin Bird ID** – free app available for Apple or Android. Very good at in field bird call ID
- **Sibley Birds 2nd edition** – app available for purchase for Apple or Android. Good at species comparison
- [Sibley Birds West: field guide to birds of Western North America 2nd ed. \(Sibley 2016\)](#) – book, kindle
- [Sibley Birds East: field guide to birds of Eastern North America 2nd ed. \(Sibley 2016\)](#) – book, kindle
- [The Feather Atlas: flight feathers of North American Birds \(USFWS\)](#) – website
- [Bird Wing and Tail Image Collection \(Slater Museum of Natural History\)](#) – website
- [Raptor Identification Resources \(Hawkwatch International\)](#) – website
- [Raptors of Montana Species Sheets \(Raptors of the Rockies and Montana Audubon\)](#) - website
- [Owl Identification Guide \(Owl Research Institute\)](#) – website
- [Nests, Eggs, and Nestlings of North American Birds 2nd ed. \(Baicich and Harrison 2005\)](#) – book
- [The Birder's Handbook: natural history of North American Birds \(Ehrlich et al. 1988\)](#) - book
- [Animal Skulls: a guide to North American Species \(Elbroch 2006\)](#) – book/kindle
- [Wildlife of the Pacific Northwest: tracking and identifying \(Moskowitz 2010\)](#) – book
- [CyberTracker Tracker Certification System for North America](#) – classes and certification

Invertebrates

- [An Introduction to the Aquatic Insects of North America 5th edition \(Merritt et al. 2019\)](#) - book
- [Key to Freshwater Mussels of Montana \(Stagliano 2019\)](#) – free PDF
- **PocketMacros** – free app available for Apple or Android for identification of macroinvertebrates

- [General information and identification guides and keys to macroinvertebrates](#) – website
- [A Guide to the Land Snails and Slugs of Montana \(Hendricks 2012\)](#) – free PDF
- [Land Snails and Slugs of the Pacific Northwest \(Burke and Leonard 2013\)](#) – book
- [Taxonomic Guides to Isopods and Myriapods of North America \(AIMG\)](#) - website
- [Spiders of North America \(Rose 2022\)](#) – book, PDF, ePub
- [Beetles of Western North America \(Evans 2021\)](#) – book, PDF, ePub
- [Beetles of Eastern North America \(Evans 2014\)](#) – book, PDF, ePub
- [Dragonflies and Damselflies of the West \(Paulson 2009\)](#) – book, PDF, ePub
- [Butterflies through Binoculars: The West \(Glassberg 2001\)](#) – book
- [Lepidoptera of the Pacific Northwest: caterpillars and adults \(Miller and Hammond 2003\)](#) – free PDF
- [Butterflies and Moths of North America Identification Tools \(BAMONA\)](#) - website
- [Caterpillar Identification \(moth, butterfly, and skipper species of North America\)](#) - website
- [Caterpillars in the Field and Garden \(Allen et al., 2005\)](#) - book
- [North American Moth Photographers Group](#) - website
- [Bumble Bees of Montana \(MSU Montana Entomology Collection\)](#) – website
- [Bumble Bees of North America: an identification guide \(Williams et al. 2014\)](#) – book, PDF, ePub
- [Common Bees of Western North America \(Messinger and Wilson 2023\)](#) – book, PDF, ePub
- [Social Wasps of North America, Central America, and the Caribbean \(Kratzer 2026\)](#) – book, PDF, ePub
- [Velvet Ants of North America \(Williams et al. 2024\)](#) – book, PDF, ePub
- [Plant Galls of the Western United States \(Russo 2021\)](#) – book, PDF, ePub

Vascular Plants

- [Consortium of Pacific Northwest Herbaria](#) – website
- [Rocky Mountain Herbarium](#) – website
- [NRCS Plants Database](#) – website
- [eFloras – Flora of North America on-line](#) - website
- [Manual of Montana Vascular Plants 2nd Edition \(Lesica et al. 2022\)](#) – book
- [Flora of the Pacific Northwest: an illustrated manual 2nd Edition \(Hitchcock and Cronquist 2018\)](#) – book
- [Flora of Glacier National Park \(Lesica 2002\)](#) - book
- [Plant Identification Terminology: an illustrated glossary 2nd Edition \(Harris and Harris 2001\)](#) – book
- [The Cambridge Illustrated Glossary of Botanical Terms \(Hickey and King 2000\)](#) – book, ePub
- [Field Guide to the Willows of East-Central Idaho \(Brunsfeld et al. 1985\)](#) – free PDF
- [The Genus Salix in North America North of Mexico \(Dorn \)](#) – free PDF
- [Winter Field Guide to the Native Shrubs of Montana \(Morris et al. 1962\)](#) – free PDF
- [Field Guide to Montana’s Wetland Vascular Plants \(Lesica and Husby 2015\)](#) – free PDF
- [Common Native and Invasive Wetland Plants in Montana \(Carpenedo and Saul 2012\)](#) – free PDF
- **Wildflowers of Montana** – free app available for Apple or Android
- [Violets of the Great Plains and Eastern North America](#) – website
- [Wildflowers of Glacier National Park and Surrounding Areas 2nd Edition \(Kimball and Lesica 2022\)](#) - book
- [Northwest Penstemons: 80 species of Penstemon native to the Pacific Northwest \(Strickler and Morley 1997\)](#) - book
- [Alpine Plants of the Northwest: Wyoming to Alaska \(MacKinnon and Pojar 2013\)](#) - book
- [Manual of the Grasses of the United States in two volumes 2nd Edition \(Hitchcock 1971\)](#) – book, kindle
- [Field Guide to the Grasses, Sedges, and Rushes of the United States \(Knobel 1977\)](#) – book, kindle
- **Montana Grasses** – app available for purchase for Apple or Android
- [Manual of the Carices of the Rocky Mountains and Colorado Basin \(Hermann 1970\)](#) – free PDF
- [Field Guide to Intermountain Sedges \(Hurd et al. 1998\)](#) – free PDF

- [Field Guide to Intermountain Rushes \(Hurd et al. 1997\)](#) – free PDF
- [Montana State University Extension Guides to Various Weeds \(MSU Extension\)](#) – free PDFs
- [Weeds of the West \(Whitson et al. 2012\)](#) – free PDF
- [Key to Identification of Invasive and Native Hawkweeds in the Pacific Northwest \(Wilson 2006\)](#) – free PDF

Non-Vascular Plants, Lichens, and Fungi

- [Montana Moss Checklist with Distributions \(Elliott and Pipp 2020\)](#) – free PDF
- History, Biogeography, and Species of Montana Mosses (Elliot and Pipp 2019) – [PDF by Request](#)
- [Consortium of Bryophyte Herbaria; checklists, images](#) - website
- [Mosses and other Bryophytes: an illustrated glossary \(Malcom and Malcom 2000\)](#) – book
- [Moss Flora of the Pacific Northwest \(Lawton 1971\)](#) – book
- [Mosses of the Northern Forest: a photographic guide \(Jenkins 2020\)](#) - book
- [Mosses, Lichens, and Ferns of Northwest North America \(Vitt et al. 1988\)](#) - book
- Hong, W. S. 2002. A Key to the Hepaticae of Montana. Northwest Science 76: 271-285. – [PDF by request](#)
- [Field Guide to the Liverwort Genera of Pacific North America \(Schofield et al. 2002\)](#) - book
- [Montana Lichens: an annotated list \(McCune et al. 2014\)](#) – free PDF
- [A Color Guidebook to Common Rocky Mountain Lichens \(St. Clair 1999\)](#) – free PDF
- [Consortium of Lichen Herbaria, including checklists and dynamic keys](#) – website
- [Ways of Enlichenment: photo gallery, keys, floras, range maps, checklists](#) - website
- [Macrolichens of the Pacific Northwest 3rd Ed. Revised & expanded \(McCune and Geiser 2023\)](#) – book, PDF
- [Lichens of North America \(Brodo et al. 2001\)](#) – book
- [Keys to Lichens of North America: revised and expanded \(Brodo et al. 2016\)](#) – book
- [Alpine Mushrooms of North America \(Cripps 2025\)](#) – book and eBook
- [Pacific Northwest Key Council: keys to mushrooms of the Pacific Northwest](#) - website
- [Mycology Collections Portal, including checklists and keys](#) - website