

SECTION III

The Natural History of Typical Plants



Lupines are the most prominent plant on Mount St. Helens, and they often facilitate the growth of other species, such as this Indian brush

Overview

Species can be organized in many ways according to common practices in a particular field. Most technical guides arrange species according to assumptions about the evolutionary relationships among the taxa, with those thought to be more primitive placed earlier in the compendium. Field guides are more pragmatic, and are organized by broad categories that are readily understood by novice and professional alike. The extremely useful *Plants of the Pacific Northwest Coast* (Pojar and MacKinnon 1994) uses a system based on growth forms. I have used a similar approach. The broad categories include Trees, Shrubs, Broadleaf flowering plants (i.e., dicots), Monocots other than graminoids, Graminoids (e.g. grasses, sedges and rushes) and Spore-bearing plants (including ferns, horsetails and mosses). Trees and shrubs start with needle-bearing species and continue with flowering plants. Within each group, species are listed alphabetically, first by their family and then their genus name. Species that do not typically grow above 1000 m are not discussed, although they may

be listed in Appendix 1.

The descriptions provided for each species are intended only to help distinguish a species from similar ones found on Mount St. Helens. I have kept technical terms to a minimum, but some are used of necessity (e.g., in families such as sedges and sunflowers). Key terms are described in the glossary. The descriptions are based on several sources. Two are particularly valuable. The U.S.D.A. provides a plant list that gives current taxonomic status, distribution by states and provinces, links to images and for some species, a listing of characteristics (<http://plants.usda.gov>). The Burke Natural History Museum, University of Washington, maintains an excellent image collection for species found in the state of Washington along with concise descriptions and miscellaneous information (<http://biology.burke.washington.edu/herbarium/imagecollection.php>).

Descriptions of characteristics

The species in the studies described in this book can

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be characterized in several ways. These are summarized for most of the common species found in damaged habitats on Mount St. Helens, arranged by growth form. Within each category, the species are listed alphabetically by family, and alphabetically within family. For each species, I provide the currently accepted scientific name, the common name used locally, its successional status, longevity, growth-form, life-form, ability to grow clonally, dispersal type, whether it is native or introduced, its wetland indicator status and the habitats within which it occurs on Mount St. Helens.