THE VASCULAR PLANTS OF CAMP CASEY
WHIDBEY ISLAND, WASHINGTON

Ronald C. Phillips
Department of Biology
Seattle Pacific College
Seattle, Washington 98119

Over the past three years a concerted effort has been made to collect the land plants from the 100 acres comprising Camp Casey. The following guide is offered so that various persons who visit the Camp may become better acquainted with the plants. Insofar as possible technical language normally encountered in more formal presentations has been eliminated.

The guide is divided into two parts - a Key to Species, and an Annotated List. Illustrations of the species reference can be found in the works of Hitchcock, Gilkey, or Lyons (see Literature Cited).

Plants have been separated into trees (woody perennial plants with one main stem), shrubs (woody perennial plants with several stems per plant), shrubs (woody perennial plants with several stems per plant), herbs, ferns, and a horsetail. Herbs are differentiated on the basis of flower color, with the exception of one group, which is set apart on the basis of inconspicuous flowers. No grasses are included. Numbers in parentheses after species names in the Key to Species refer to the numbers of those species in the Annotated List.

A key is a device which helps one first to distinguish the characters of an organism, next to separate it, and then to give it a name for the purpose of identification. One can organize a key in

various ways, but in every key there are two alternative choices at each step in the key. These alternatives are called dichotomous leads.

In the following keys I have adopted numbers and placed them together, i.e., two #1, two #2, etc., for ease in distinguishing the two alternatives at each level in the keys.

Use the Key to Major Groups first when working with a plant, the name of which is unfamiliar to you, unless you know that it is a tree, shrub, herb or fern. If you are certain that the plant is one of these four types, then proceed directly to the key for that particular group.

Key to Major Groups

We first have a choice of two alternatives. Plants that are woody (first #1) are subdivided under #2. Under #2 we have two alternatives: those woody plants with one main trunk (first #2), and those woody plants with more than one main trunk (second #2). Plants that are not woody (second #1) are subdivided under #3.

Keys to Trees

Because it is new, note that this key begins with two #1, two #2, etc. Plants (trees) either have needles (you are directed to #2) or they do not (you are directed to #4). If your plant in hand has needles and you have proceeded to #2, then you have to decide whether all needles on the branches are uneven in length (first #2, Western hemlock) or whether the needles are all the same length (you then proceed to #3, where the user again has to choose between one of two alternatives). Thus, a key presumes that the user can make a reasonably accurate observation on plants. It further enables him to learn

much more of his plant than just the mere name.

Keys to Herbs

Owing to the difficulty of distinguishing so many herb species on the basis of vegetative (non-reproductive) parts or habit (growth form, shape, height) alone, flower color is also used as a basis of making the major separations. First, consult the capital letter designations for the flower color of the herb in question, then begin the key with #1 under the capital letter designation of the flower color of your herb.

Terms: Compound leaves - leaf blades dissected into several smaller leaflets. The only valid way of distinguishing a simple leaf from a compound leaf is to look for a bud. A leaf has a bud at its base where it joins the stem, while leaflets of a leaf do not each have buds at the point where they join their leaf midrib.

Leaves 5-foliate - compound leaves with 5 leaflets.

Leaves 3-foliate - compound leaves with 3 leaflets.

Leaves palmately lobed - some leaves have wavy margins. If the undulations which comprise these margins extend into the leaf blade deeply enough, the leaf is said to be lobed. If the undulations extend toward the central midrib of the blade, the leaf is said to be pinnately lobed; if the undulations extend backward toward the leaf base, the leaf is said to be palmately lobed. If the undulations extend all the way to the central midrib of the leaf or completely to the base of the leaf blade, the simple leaf blade is dissected into leaflets, and the leaf is said to be compound.

KEY TO MAJOR GROUPS

1. Woody plants ..... 2.
1. Plants not woody ..... 3.
   2. Plants with one main trunk ..... Trees.
   2. Plants with more than one main trunk ..... Shrubs.

KEY TO MAJOR GROUPS
(continued)

3. Plants producing flowers ..... Herbs.

3. Plants not producing flowers ..... Ferns, Horsetail.

TREES

1. Plants with needles ..... 2.
1. Plants not with needles ..... 4.
   2. All needles on a branch uneven in length ..... Western hemlock (1).
   2. All needles approximately equal in length ..... 3.
3. Buds at end of branches sharp-pointed ..... Douglas fir (2).
3. Buds at end of branches blunt ..... Grand fir (3).
   4. Leaves compound ..... Mountain ash (4).
   4. Leaves not compound ..... 5.
5. Branches with strong thorns ..... Hawthorne (5).
5. Branches with no thorns ..... 6.
   6. Leaves with a pair of small knobs or glands at base of leaf ..... Bitter cherry (6).
   6. Leaves with no glands ..... 7.
7. Female flowers as a woody cone ..... Red alder (7).
7. Female flowers not in cones ..... Scouler's willow (8).

SHRUBS

1. With thorns ..... 2.
1. No thorns ..... 7.
   2. Flowers white ..... 3.
   2. Flowers pink or red ..... 5.
3. Plant erect ..... Coast black-gooseberry (9).
3. Plant a trailing-like vine ..... 4.
   4. Leaves 5-foliate ..... Himalaya blackberry (10).
   4. Leaves 3-foliate ..... Pacific blackberry (11).
5. Plant trailing on the ground ..... Snow bramble (12).
5. Plant erect ..... 6.

6. Leaves 3-foliate ..... Salmon berry (13).

6. Leaves 5-7 foliate ..... Nutka rose (14).

7. Leaves opposite ..... 8.

7. Leaves alternate ..... 10.

8. Leaves compound ..... Red elderberry (15).

8. Leaves not compound ..... 9.

9. Leaves 2 in. - 5 in. long; flowers yellow; fruits black, in pairs ..... Black twin berry (16).

9. Leaves $1\frac{1}{2}$ in. - 2 in. long; flowers pink; fruits white ..... Snowberry (17).

10. Leaves compound ..... 11.

10. Leaves simple ..... 12.

11. Leaflets 5 - 9 ..... Oregon grape (18).

11. Leaflets 9 - 19 ..... Long-leaved Oregon grape (19).

12. Leaves lobed ..... 13.

12. Leaves unlobed ..... 15.

13. Branches very prominently green and angled ..... Red huckleberry (20).

13. Branches not prominently green and angled ..... 14.

14. Leaf blades 2 in. - $3\frac{1}{2}$ in. long ..... Salal (21).

14. Leaf blades 3/4 in. - $1\frac{1}{2}$ in. long ..... Shadbush (22).

15. Flowers reddish ..... Red flowering current (23).

15. Flowers white ..... 16.

16. Leaves palmately lobed ..... Thimbleberry (24).

16. Leaves not palmately lobed ..... Ocean spray (25).

FERNS AND HORSETAIL

1. Plants jointed ..... Giant horsetail (26).

1. Plants not jointed ..... 2.

2. Leaves erect on a coarse stiff 'stem' ..... Bracken fern (27).

2. Leaves not so erect ..... 3.

3. Leaflets with a small 'ear' at their base ..... Western sword fern (28).

3. Leaflets lacking a small 'ear' ..... Licorice fern (29).

HERBS

A. Flowers inconspicuous.

1. Leaves very long, erect, sharp-pointed ..... Rush (30).

1. Leaves otherwise ..... 2.

2. Low, spreading, jointed, marsh plants ..... Glasswort (31).

2. Plants otherwise ..... 3.

3. Plants, twining, parasitic on glasswort ..... Salt-marsh dodder (32).

3. Plants otherwise ..... 4.

4. Plants with whorled leaves; prickly feel ..... Bedstraw (33).

4. Plants otherwise ..... 5.

5. Leaves opposite; plants with stinging hairs ..... Nettle (34).

5. Leaves and plants otherwise 6.

6. Leaves arrow-shaped at base ..... Red sorrel (35).

6. Leaves not so shaped ..... Willow dock (36).

B. Flowers blue or purple.

1. Leaves compound ..... Lupines (2 spp.; see Annotated List for species separation). (37, 38).

1. Leaves not compound ..... 2.

2. Leaves opposite ..... Self heal (39).

2. Leaves not opposite ..... 3.

3. Leaves spiny-tipped ..... 4.

3. Leaves not spiny-tipped ..... 5.

4. Stem conspicuously spiny-winged by the downward extension of enfolded leaf bases ..... Bull thistle (40).

4. Stem not conspicuously spiny ..... Canada thistle (41).

5. Flowers clustered in heads ..... Daisy (42).

5. Flowers not clustered in heads ..... 6.

6. Plant 4 in. to 20 in. tall; petals blue ..... Forget-me-not (43).

6. Plant 20 in. to 72 in. tall; petals pink-purple, lower one spotted ..... Foxglove (44).

C. Flowers pink.

1. Leaves simple ..... 2.

1. Leaves compound ..... 6.

2. Leaves opposite ..... Hedge nettle (45).

2. Leaves alternate ..... 3.

3. Flowers pink ..... 4.

3. Flowers red or rose ..... 5.

4. Leaves very long & narrow ..... Nodding onion (46).

4. Leaves as broad as long ..... Dove's foot geranium (47).

5. Plants 8 in. - 30 in. tall ..... Common paintbrush (48).

5. Plants 3 ft. - 10 ft. tall Fireweed (49).

6. Twining tendrils at end of leaf ..... 7.

6. No tendrils at end of leaf ..... 9.

7. Stipules at leaf bases as large as leaflets ..... Beach pea (50).

7. Stipules at leaf bases much smaller than leaflets ..... 8.

8. One to three flowers per leaf base ..... Common vetch (51).

8. Twenty to sixty flowers per leaf base ..... Hairy vetch (52).

9. Leaves 3-foliate ..... Red clover (53).

9. Leaves otherwise ..... Filaree (54).

D. Flowers yellow.

1. Flowers clustered in heads on the ends of stalks ..... 2.

1. Flowers not in heads ..... 9.

2. Flowering heads quite sticky or gummy ..... Gumplant (55).

2. Flowering heads not gummy ..... 3.

3. Flowering stalk exuding white milk when broken ..... 4.

3. Flowering stalk not exuding white milk ..... 8.

4. Leaves of plant mostly basal ..... 5.

4. Leaves otherwise ..... 6.

5. Flowering stalk unbranched ..... Dandelion (57).

5. Flowering stalk branched ..... False dandelion (58).

6. Leaves mostly with toothed margins ..... Smooth hawksbeard (59).

6. Leaves with more deeply lobed margins ..... 7.

7. Leaves prickly margined ..... Perennial sow thistle (60).

7. Leaves lobed but not prickly margined ..... Hawksbeard (61).

8. Leaves compound ..... Small hop clover (62).

8. Leaves not compound ..... Narrow goldenrod (56).

9. Leaves compound with 19-29 leaflets ..... Giant vetch (63).

9. Leaves not compound ..... 10.

10. Leaves opposite ..... Orange honeysuckle (64).

10. Leaves not opposite ..... 11.

11. Leaves unlobed, densely hairy ..... Common mullein (65).

11. Leaves, at least those at the base, lobed, not hairy .....12.

12. Leaf bases conspicuously clasping around the stem ..... Mustard (66).

12. Leaf bases not conspicuously clasping ..... 13.

13. Leaves more or less palmately lobed .....14.

13. Leaves not palmately lobed ..... Hedge mustard (67).

14. Flowers in small umbrella-like clusters of 8-13 flowers; clusters about $\frac{1}{2}$ in. wide .....Western snake root (68).

14. Flowers single at end of flowering stem .....Western field buttercup (69).

E. Flowers white.

1. Flowers clustered in dense heads at end of flowering stalks ..... 2.

1. Flowers not clustered in heads ..... 7.

2. Leaves highly dissected into fine segments .....Yarrow (70).

2. Leaves not highly dissected .....3.

3. Leaves compound, 3-foliate .....White clover (85).

3. Leaves not compound ..... 4.

4. Plant not erect, develops at ground level ..... English daisy (71).

4. Plant erect ..... 5.

5. Leaves lobed or wavy-margined ..... Ox-eye daisy (72).

5. Leaves not lobed or wavy-margined ..... 6.

6. Plant white-wooly; leaves of equal width throughout their length .....Pearly everlasting (73).

6. Plant not white-wooly; leaf blades much broader than the leaf stalks .....White flowered hawkweed (74).

7. Leaves opposite ..... 8.

7. Leaves not opposite ..... 10.

8. Leaves with at least a few blunt teeth ..... Yerba Buena (75).

8. Leaves smooth-margined throughout ..... 9.

9. Stem prostrate on ground but flowering stems only 1 1/4 in. tall ..... Chickweed (76).

9. Stems prostrate on ground but flowering stems 2 in.-20 in. tall ..... Mouse-ear chickweed (77).

10. Leaves crowded and whorled at stem tip ..... Broad-leaved star-flower (78).

10. Leaves not so arranged ..... 11.

11. Leaves all basal, arising at ground level ..... 12.

11. Leaves arranged along the stem ..... 15.

12. Leaves green with white mottlings ..... Rattle-snake plantain (79).

12. Leaves all green ..... 13.

13. Leaves conspicuously parallel-veined ..... English plantain (80).

13. Leaves not parallel-veined ..... 14.

14. Leaves compound, 3-foliate ... Common wild strawberry (81).

14. Leaves not compound ..... Vernal whitlow grass (82).

15. Leaves parallel-veined ..... 16.

15. Leaves not parallel-veined ..... 17.

16. Stem leaves triangular, heart-shaped at base ..... False lily-of-the-valley (83).

16. Leaves not so shaped ..... Dense flowered rein orchid (84).

17. Flowers in umbrella-like clusters ..... 18.

17. Flowers not in umbrella-like clusters ..... 20.

18. Stems purple spotted; leaves finely dissected ..... Poison hemlock (86).

18. Stems not purple spotted ..... 19.

19. Leaves finely dissected ..... Conioselinum (87).

19. Leaves 3-foliate; leaflets palmately lobed ..... Cow parsnip (88).

20. Leaves with tendrils at ends of leaves ..... Hairy vetch (89).

20. Leaves without tendrils ..... 21.

21. Leaves with 4-10 lobes ..... Little bitter cress (90).

21. Leaves 3-foliate ..... 22.

22. Leaflets usually lobed no more than half their length, not cleft into narrow segments ..... Three-leaved coolwort (91).

22. Leaflets divided nearly their full length and cleft into narrow oblong segments ..... False mitre-wort (92).

ANNOTATED LIST

1. Tsuga heterophylla (Raf.) Sarg. Western Hemlock.

   Pinaceae. Pine family. Needles more or less in two ranks. Leaves of uneven length interspersed along the branches. Leaves not over $\frac{1}{2}$ in. in length. Tip of tree droops conspicuously. Perennial.

2. Pseudotsuga menziesii (Mirb.) Franco. Douglas Fir.

   Pinaceae. Pine family. Cones with pitch-fork shaped bracts. Needles flat, sharp-pointed, about 1 in. in length. Look for sharp-pointed buds at branch ends. Perennial.

3. Abies grandis Lindl. Grand Fir.

   Pinaceae. Pine family. Needles conspicuously two-ranked, 1 1/4-2 in. long. Needles are blunt and slightly notched. Buds at branch ends are blunt. Perennial.

4. Sorbus acuparia L. Mountain Ash.

   Rosaceae. Rose family. Flowers expected from May to June. Flowers white. Conspicuous red berries observed in July. Flowers in flat-topped clusters. Leaves are compound with 11-15 leaflets. Perennial.

5. Crataegus oxyacantha L. Hawthorne.

   Rosaceae. Rose family. Branches with strong thorns. Has deeply lobed leaves. Bunches of scarlet berries persist over winter. Perennial.

6. Prunus emarginata (Dougl.) Walp. Bitter Cherry.

   Rosaceae. Rose family. Flowers expected from April to June. Flowers white, 3-10 in a cluster. Fruits are pea-size red berries. Leaves have two small knobs or glands at blade base. Perennial.

7. Alnus rubra Bong. Red or Oregon Alder.

   Betulaceae. Birch family. Expect flowers from March and April. Bark dirty grey. Leaves 3-5 in. long with conspicuous scalloped edges. Female flowers in a woody cone. Perennial.

8. Salix scouleriana Barr. Scouler's Willow.

   Salicaceae. Willow family. Expect flowers in spring. Flowers formed in catkins. Leaves wide, roundish, 2-4 in. long (1/3 as wide). Perennial.

9. Ribes divaricatum Dougl. Coast Black Gooseberry.

   Grossulariaceae. Currant or gooseberry family. Flowers expected from April to May. Flowers white (may be red). Spiny at leaf nodes. Perennial.

10. Rubus procerus P. J. Muell. Himalaya Blackberry.

    Rosaceae. Rose family. Expect flowers from June to August. Sprawling stems. With strong prickles. Flowers white. Perennial.

11. Rubus ursinus Cham. and Schlect. Douglas Berry, Pacific Blackberry, Dewberry.

    Rosaceae. Rose family. Expect flowers from April to early August. Trailing vine-like. With prickles. Flowers white. Perennial.

12. Rubus nivalis Dougl. Snow Bramble, Subalpine Blackberry.

    Rosaceae. Rose family. Expect flowers during June and July. Trailing vine-like. Prickly. Flowers pink (occasionally white or purple). Observed in fruit in July. The most abundant trailing blackberry on the property. Perennial.

13. Rubus spectabilis Pursh. Salmon Berry.

    Rosaceae. Rose family. Expect flowers from March to June. Flowers red (to reddish purple). Prickly. Perennial.

14. Rosa nutkana Presl. Nutka Rose.

    Rosaceae. Rose family. Expect flowers from May to July. Flowers pink (to deep rose). Observed with some flowers, mostly fruit, in July. Prickly. Perennial.

15. Sambucus racemosa L. Red Elderberry.

    Caprifoliaceae. Honeysuckle family. Expect flowers from March to July. Flowers white. Red berries. Perennial.

16. Lonicera involucrata (Rich.) Banks. Black Twin-berry.

    Caprifoliaceae. Honeysuckle family. Expect flowers from April to August. Flowers yellow. Perennial.

17. Symphoricarpos albus (L.) Blake. Snowberry.

    Caprifoliaceae. Honeysuckle family. Expect flowers from May to August. Flowers pink (or white). Plants have conspicuous white berries which persist for most of the year. Perennial.

18. Berberis aquifolium Pursh. Oregon Grape.

    Berberidaceae. Barberry family. Expect flowers from March to May. Flowers yellow. Leaflets 5-9. Perennial.

19. Berberis nervosa Pursh. Long-leaved Oregon Grape.

    Berberidaceae. Barberry family. Expect flowers from March to June. Flowers yellow. Leaflets 9-19. Perennial.

20. Vaccinium parvifolium Smith. Red Huckleberry.

    Ericaceae. Heath family. Expect flowers from April to June. Flowers pink. Red berries observed in July. Prominently angled green branches. Perennial.

21. Gaultheria shallon Pursh. Salal.

    Ericaceae. Heath family. Expect flowers from May to July. Flowers pinkish. Perennial.

22. Amelanchier alnifolia Nutt. Serviceberry, Shadbush.

    Rosaceae. Rose family. Expect flowers from April to July. Flowers white. Perennial.

23. Ribes sanguineum Pursh. Red Flowering or Oregon Currant.

    Crossulariaceae. Gooseberry or currant family. Expect flowers from March to June. Flowers rose-colored. Perennial.

24. Rubus parviflorus Nutt. Thimble-berry.

    Rosaceae. Rose family. Expect flowers from May to July. Flowers white. No thorns. Perennial.

25. Holodiscus discolor (Pursh) Maxim. Ocean Spray.

    Rosaceae. Rose family. Expect flowers from June to August. Flowers white. Perennial.

26. Equisetum maximum Lam. Giant Horsetail.

    Equisetaceae. Horsetail family. Stems jointed, pale green. No flowers. Perennial.

27. Pteridium aquilinum (L.) Kuhn. Western Brake-fern, Bracken Fern.

    Polypodiaceae. Fern family. Leaves supported by stiff, stem-like petioles. Perennial.

28. Polystichum munitum (Kaulfuss) Presl. Western Sword Fern.

    Polypodiaceae. Fern family. Seen throughout the year. Perennial.

29. Polypodium vulgare L. Licorice Fern.

    Polypodiaceae. Fern family. Perennial.

30. Juncus sp. Rush.

    Juncaceae. Rush family. Long green pointed leaves. In the marsh.

31. Salicornia virginica L. Glasswort, Saltwort, Pickle-weed.

    Chenopodiaceae. Goosefoot family. Expect flowers from June to September. Flowers very inconspicuous. Plants green, jointed. In marsh of Lake Crockett. Perennial.

32. Cuscuta salina Engelm. Salt-marsh Dodder.

    Cuscutaceae. Dodder family. Expect flowers from June to August. Flowers inconspicuous. Twining, parasitic on Salicornia. Perennial.

33. Galium aparine L. Bedstraw.

    Rubiaceae. Madder family. Expect flowers from April to June. Flowers small, greenish-white. Leaves whorled; plants prickly to the touch. Plants annual.

34. Urtica dioica L. Nettle.

Urticaceae. Nettle family. Expect flowers from May to September. Flowers greenish, inconspicuous. Plant with abundant stinging hairs. Observed in fruit in July. Perennial.

35. Rumex acetosella L. Red Sorrel, Sour Dock.

Polygonaceae. Knotweed or buckwheat family. Expect flowers from May to July. Flowers reddish. Perennial.

36. Rumex salicifolius Weinm. Willow or Narrow-leaved Dock.

Polygonaceae. Knotweed or buckwheat family. Expect flowers from June to September. Flowers greenish-brown to deep pink. Perennial.

37. Lupinus albicaulis Dougl. Sickle-keeled Lupine, Silky Stemmed Lupine.

Leguminosae. Pea family. Expect flowers in June and July. Flowers blue. Observed flowers and fruit in July. The petal called the keel is not hairy. Perennial.

38. Lupinus rivularis Dougl. Riverbank Lupine.

Leguminosae. Pea family. Expect flowers from April to June. Flowers blue. The petal called the keel is hairy. Perennial.

39. Prunella vulgaris L. Heal-all, Self-heal.

Labiatae. Mint family. Expect flowers from May to September. Flowers blue-violet (pink or white). Perennial.

40. Cirsium vulgare (Savi) Airy-Shaw. Bull Thistle.

Compositae. Daisy or sunflower family. Expect flowers from July to September. Flowers purple. Biennial.

41. Cirsium arvense Scop. Canada Thistle.

Compositae. Daisy or sunflower family. Expect flowers during July and August. Flowers pink-purple. Perennial.

42. Erigeron subtrinervis Rydb. Daisy, Fleabane.

Compositae. Daisy or sunflower family. Expect flowers during July and August. Flowers blue (sometimes pink). Perennial.

43. Myosotis discolor Pers. Forget-Me-Not.

    Boraginaceae. Borage family. Expect flowers from May to August. Flowers bluish. Annual or biennial.

44. Digitalis purpurea L. Foxglove.

    Scrophulariaceae. Figwort family. Expect flowers during June and July. Flowers pink-purple, lower side spotted and paler. Biennial.

45. Stachys cooleyae Heller. Oregon Betony, Hedge Nettle.

    Labiatae. Mint family. Expect flowers from June to August. Flowers red-purple. Leaves opposite. Perennial.

46. Allium cernuum Roth. Nodding Onion.

    Liliaceae. Lily family. Expect flowers in late spring (observed in early July). Flowers pink. Perennial.

47. Geranium molle L. Dove's-foot Geranium.

    Geraniaceae. Geranium family. Expect flowers from April to September. Flowers pink. Annual.

48. Castilleja miniata Dougl. Common Paintbrush.

    Scrophulariaceae. Figwort family. Expect flowers from May to September. Flowers red. Perennial.

49. Epilobium angustifolium L. Fireweed.

    Onagraceae. Evening primrose family. Expect flowers from June to September. Flowers rose (to purple). Perennial.

50. Lathyrus japonicus Willd. Beach Pea.

    Leguminosae. Pea family. Expect flowers from May to September. Flowers reddish (purple to light blue). Near beach. Perennial.

51. Vicia sativa L. Common Vetch, Tare.

    Leguminosae. Pea family. Expect flowers from May to July. Flowers red (orchid to purplish). Observed with flowers and fruit in July. Perennial.

52. Vicia villosa Roth. Annual Cow Vetch, Hairy Vetch, Wooly Vetch, Winter Vetch.

Leguminosae. Pea family. Expect flowers from May to August. Flowers reddish (purple, violet). Annual.

53. Trifolium pratense L. Red Clover.

Leguminosae. Pea family. Expect flowers from May to August. Flowers deep red. Perennial.

54. Erodium cicutarium (L.) L'Her. Filaree, Storksbill, Heronsbill.

Geraniaceae. Geranium family. Expect flowers from April to July. Flowers pink. At maturity the carpels separate and each is tipped by a greatly elongated style. Annual.

55. Grindelia integrifolia DC. Gumplant, Resinweed.

Compositae. Daisy or sunflower family. Expect flowers from June to October. Flowers yellow. Flowering heads sticky and gummy. Perennial.

56. Solidago canadensis L. Narrow Goldenrod, Late Goldenrod.

Compositae. Daisy or sunflower family. Expect flowers from July to October. Flowers yellow. Perennial.

57. Taraxacum officinale Weber. Dandelion.

Compositae. Daisy or sunflower family. Expect flowers from early spring into summer. Observed fruiting in July. Yellow flowers which later form a white ball of fruits. Perennial.

58. Hypochaeris radicata L. False Dandelion.

Compositae. Daisy or sunflower family. Expect flowers from May to October. Flowers yellow. Parade ground is almost solid with this species. Perennial.

59. Crepis capillaris (L.) Wallr. Smooth Hawksbeard.

Compositae. Daisy or sunflower family. Expect flowers from May to November. Flowers yellow. Annual.

60. Sonchus arvensis L. Perennial Sow Thistle.

    Compositae. Daisy or sunflower family. Expect flowers from July to October. Flowers yellow. Observed in flowers and fruit in July. Perennial.

61. Crepis nicaeensis Balb. Hawk's Beard.

    Compositae. Daisy or sunflower family. Observed flowering in July. Flowers yellow. Annual or biennial.

62. Trifolium dubium Sibth. Small Hop Clover.

    Leguminosae. Pea family. Expect flowers from April to September. Flowers yellow. Annual.

63. Vicia gigantea Hook. Giant Vetch.

    Leguminosae. Pea family. Expect flowers from May to July. Flowers orange (reddish brown). Perennial.

64. Lonicera ciliosa (Pursh) Poir. Orange Honeysuckle.

    Caprifoliaceae. Honeysuckle family. Expect flowers from May to July. Flowers orange-yellow (to orange-red). Twining vine. Perennial.

65. Verbascum thapsus L. Common Mullein.

    Scrophulariaceae. Figwort family. Expect flowers from June to August. Flowers yellow. Stem and leaves densely hairy. Biennial.

66. Brassica campestris L. Mustard.

    Cruciferae. Mustard family. Expect flowers from April to June. Flowers yellow. Observed fruit in July. Annual.

67. Sisymbrium officinale (L.) Scop. Hedge Mustard.

    Cruciferae. Mustard family. Expect flowers from March to September. Flowers pale yellow. Annual.

68. Sanicula crassicaulis Poepp. Western Snake-root.

    Umbelliferae. Carrot or parsley family. Expect flowers during May and June. Flowers yellow. Observed in fruit in July. Perennial.

69. Ranunculus occidentalis Nutt. Western Field Buttercup.

Ranunculaceae. Buttercup family. Expect flowers from April to June. Observed in fruit in July. Flowers yellow. Perennial.

70. Achillea millefolium L. Yarrow.

Compositae. Daisy or Sunflower family. Expect flowers from April to October. Flowers white. Leaves finely dissected into small segments. Perennial.

71. Bellis perennis L. English Daisy, European Daisy.

Compositae. Daisy or sunflower family. Expect flowers from March to September. Flowers white (to pink or purple). Perennial.

72. Chrysanthemum leucanthemum L. Marguerite, Ox-eye Daisy.

Compositae. Daisy or sunflower family. Expect flowers from May to October. Flowers white. Perennial.

73. Anaphalis margaritacea (L.) B. & H. Pearly Everlasting.

Compositae. Daisy or sunflower family. Expect flowers from July to September. Flowers white. White wooly plants. Perennial.

74. Hieracium albiflorum Hook. White-flowered Hawkweed.

Compositae. Daisy or sunflower family. Expect flowers from June to August. Flowers white. Perennial.

75. Satureja douglasii (Benth.) Briq. Yerba Buena.

Labiatae. Mint family. Expect flowers during June and July. Flowers white. Perennial.

76. Stellaria media (L.) Cyr. Chickweed.

Caryophyllaceae. Pink family. Expect flowers from February to October. Flowers white. A most troublesome weed, persisting and spreading during winter. Annual or surviving during winter in mild moist climates.

77. Cerastium arvense L. Field Chickweed, Mouse-ear Chickweed.

Caryophyllaceae. Pink family. Expect flowers from April to August. Flowers white. Perennial.

78. Trientalis latifolia Hook. Broad-leaved Star-flower.

Primulaceae. Primrose family. Expect flowers from April to July. Flowers white. Leaves crowded and whorled at the stem tip. Perennial.

79. Goodyera oblongifolia Raf. Rattlesnake Plantain.

Orchidaceae. Orchid family. Observed flowering in July. Flowers white. All leaves are in a basal cluster. Leaves green with white mottlings. Perennial.

80. Plantago lanceolata L. English Plantain, Black Plantain, Narrow-leaved Plantain, Ribwort.

Plantaginaceae. Plantain family. Expect flowers from April to August. Flowers white. Leaves conspicuously parallel-veined, all arising from base of plant at ground level. Perennial.

81. Fragaria virginiana Duchesne. Common Wild Strawberry.

Rosaceae. Rose family. Expect flowers from May to August. Flowers white. Perennial.

82. Draba verna L. Vernal Whitlow-grass.

Cruciferae. Mustard family. Expect flowers from February to May. Flowers white. Annual.

83. Maianthemum bifolium DC. False Lily-of-the-valley.

Liliaceae. Lily family. Observed flowers in May; sterile in July. Grows in shady moist woods. Leaves triangular or heart-shaped. Perennial.

84. Habenaria greenei Jeps. Dense Flowered Rein Orchid.

Orchidaceae. Orchid family. Observed in flower in July. Flowers greenish-white. Perennial.

85. Trifolium repens L. White Clover.

Leguminosae. Pea family. Expect flowers from April to September. Flowers white. Perennial.

86. Conium maculatum L. Poison Hemlock.

Umbelliferae. Carrot or parsley family. Expect flowers from May to August. Flowers white. Stems purple-spotted. Biennial.

87. Conioselinum pacificum (Wats.) Coult. & Rose.

Umbelliferae. Carrot or parsley family. Expect flowers during July and August. Flowers white. Perennial.

88. Heracleum lanatum Michx. Cow Parsnip.

Umbelliferae. Carrot or parsley family. Expect flowers from June to August. Flowers white. Observed in fruit in July. Perennial.

89. Vicia hirsuta (L.) Koch. Hairy Vetch, Tiny Vetch.

Leguminosae. Pea family. Expect flowers from May to July. Flowers white (or pale blue). Annual.

90. Cardamine oligosperma Nutt. Little Bittercress, Bittercress.

Cruciferae. Mustard family. Expect flowers from March to July. Flowers white. Annual or biennial.

91. Tiarella trifoliata L. Three-leaved Coolwort.

Saxifragaceae. Saxifrage family. Expect flowers from May to August. Flowers white. Perennial.

92. Tiarella laciniata Hook. False-mitrewort.

Saxifragaceae. Saxifrage family. Expect flowers from May to July. Flowers white. Perennial.

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This series of volumes is a MUST for any serious collector. It is beautifully illustrated for each species.

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