Guide to the Apiaceae Family
Plants of the Carrot Family (Formerly Umbelliferae)

Family Characteristics:

General:
• Biennial to perennial herb
• Stems, petioles, and fruits contain abundant resin canals
• Wide range of edibility
  o highly edible (e.g. carrot) to deadly poisonous (e.g. poison hemlock)
  o **USE CAUTION WHEN IDENTIFYING PLANTS**

Inflorescence:
• Small, usually perfect (or sometimes staminate only) flowers; composed of 5 white, yellow, or
greenish petals; if present at all, the sepals are small but distinct
• Flowers arranged in compound umbels
  o Umbrella-shaped cluster of flowers
  o Compound, being composed of a number of smaller clusters of flowers
• Flowers actinomorphic
  o Radial, meaning they can be divided into 3 or more identical sectors
• Inflorescence very similar among species
  o Useful for identifying family, but not species

Fruit:
• Schizocarps, distinctive feature of the family
  o Small, dry fruit divided at maturity into two seeds
  o Variously shaped ribs or prickles; backs of seeds are rounded or flattened
    ▪ In many species, some of the ribs have broad, flat wings

Stems & Leaves:
• Furrowed, hollow stems
• Alternate to nearly opposite compound leaves
• No stipules but petioles are frequently sheathing and leaves may be perfoliate
• Leaf blade usually dissected, ternate or pinnatifid, but simple and entire in some genera

Legend:
• **Red** = Invasive Plant
• **Green** = Native Plant
• Organized alphabetically by scientific name
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Aegopodium podagraria (Goutweed/Bishop’s Weed)

Characteristics:

- General:
  - Perennial herb from a long-creeping rhizome, often in bundles; plants creeping, patch-forming
- Flowers & Fruit:
  - Inflorescence terminal in compound umbels; petals white or sometimes pink, usually lacking bracts
  - Egg-shaped, 3-4 mm long, ribs inconspicuous
- Stems & Leaves:
  - Stems hollow, grooved, glabrous, 0.3-1.0 m tall
  - Basal leaves 2 times pinnately-cut, leaf segments stalked, egg-shaped, the tips long-pointed, stem leaves deeply indented with leaflets once to several times compound, 10-20 cm long, the segments 4-8 cm long, sessile or shortly stalked, reduced upwards

Locations & Habitat:

- Habitat mesic to dry roadsides and waste places in the lowland zone; rare in SW BC, known only from the lower Fraser Valley

Notes:

- Forms dense patches, displaces native species, and greatly reduces species diversity in the ground layer, can spread by root fragments
- Introduced from Eurasia
Angelica arguta (Sharptooth Angelica)

Characteristics:

- General:
  - Perennial herb from a taproot

- Flowers & Fruit:
  - Inflorescence terminal, flat-topped, of umbrella-like clusters with 1-4 secondary clusters from the main stem; flowers white or sometimes pinkish
  - Fruits numerous, 4-7 mm long, glabrous, dorsal ribs narrowly winged

- Stems & Leaves:
  - Stems erect, 0.5-2.0 m tall
  - Stem leaves compound with three major divisions, divided in turn once or twice again; leaflets hairy along the underside of the veins or glabrous, 4-14 cm long

Locations & Habitat:

- Habitat wet to moist streambanks, meadows and open forests in the lowland, steppe and montane zones; frequent in extreme S BC; E to AB and S to WY, UT and N CA

Notes:

- Native to Canada
Angelica genuflexa (Kneeling Angelica)

Characteristics:
- General:
  - Stout perennial herb from a taproot
- Flowers & Fruit:
  - Inflorescence terminal, of umbrella-like clusters; flowers white or pinkish; involucral bracts lacking
  - Fruits rounded, 3-4 mm long, glabrous, with broadly winged lateral ribs
- Stems & Leaves:
  - Stems 1-3 m, glabrous, hollow, arising from erect, tuberous, chambered stem-base, often purplish and glaucous
  - Stem leaves compound with three major divisions that are in turn divided again; primary divisions bent back (not directed forward as in other similar species); leaf axis bent; leaflets reflexed, oblong to lanceolate, 4-10 cm long

Locations & Habitat:
- Habitat moist streambanks and open forests in the montane zone; common throughout BC, infrequent in the Queen Charlotte Islands and the adjacent coast; amphiberingian, N to AK, E to AB and S to N CA; E Asia

Notes:
- Native to Canada
Anthriscus caucalis (Bur Chervil)

Characteristics:

- **General:**
  - Annual or biennial herb from a taproot

- **Flowers & Fruit:**
  - Inflorescence small, on short stalks 2 cm long opposite the upper leaves, in umbrella-like clusters of 3-7 flowers, each with a ring of short, flattened hairs
  - Fruits egg-shaped, 4 mm long, covered with short, thick, hooked prickles and an unarmed short stout beak

- **Stems & Leaves:**
  - Stems branched, glabrous, 40-90 cm tall
  - Basal and stem leaves similar, triangular in outline, stalked, reduced upwards, coarse-hairy

Locations & Habitat:

- 1 potential site in CSRD in SA IPMA; may have been misidentified
- Habitat moist fields, ditches, disturbed sites and waste places in the lowland zone; rare in SW BC, known from SE Vancouver Island, the Gulf Islands and the Fraser River delta

Notes:

- Introduced from Europe
**Anthriscus cerefolium** (Garden Chervil)

**Characteristics:**
- **General:**
  - Annual or biennial herb from a taproot
- **Flowers & Fruit:**
  - Inflorescence small, on stalks 2 cm long, borne opposite the upper leaves, in umbrella-like clusters
  - Fruits linear, 7-9 mm long, including the 2-3 mm long beak, the beak 1/3 the length of the body, glabrous
- **Stems & Leaves:**
  - Stems branching, glabrous to sparsely soft-hairy, 50-70 cm tall
  - Basal and stem leaves similar, triangular in outline, glabrous to sparsely soft-hairy, reduced upwards

**Locations & Habitat:**
- No sites in CSRD
- Habitat moist waste places in the lowland zone; rare in SW BC, known only from the lower Fraser Valley

**Notes:**
- Introduced from Europe
Anthriscus sylvestris (Wild Chervil)

Characteristics:
- General:
  - Annual or biennial herb from a taproot
- Flowers & Fruit:
  - Inflorescence small, on stalks 2 cm long, borne opposite the upper leaves, in umbrella-like clusters
  - Fruits linear, 6-7 mm long, including the 1 mm long beak, the beak 1/6 the length of the body, glabrous
- Stems & Leaves:
  - Stems branching, glabrous, to sparsely soft-hairy, 50-100 cm tall
  - Basal and stem leaves similar, triangular in outline, glabrous to sparsely soft-hairy, reduced upwards

Locations & Habitat:
- 6 sites in CSRD in SA and Rev IPMA’s
- Habitat wet to moist disturbed sites, fields and margins of woods in the lowland and montane zones; rare in SW and SE BC

Notes:
- Introduced from Europe
**Carum carvi** (Caraway)

**Characteristics:**

- **General:**
  - Biennial herb from a taproot

- **Flowers & Fruit:**
  - Inflorescence terminal, in umbrella-like clusters; flowers white or rarely pink; spokes of the umbel 7-14
  - Fruit broadly oblong-elliptic, 3-4 mm long, scented

- **Stems & Leaves:**
  - Stems single at the base, branching above, 0.3-1 m tall
  - Upper leaves finely dissected into linear, threadlike segments; lower leaves stalked, well-developed, 8-17 cm long

**Locations & Habitat:**

- 3 sites in CSRD in Rev and Golden IPMA’s
- Habitat in fields and waste places in the montane zone; infrequent throughout BC S of 56°N

**Notes:**

- Introduced from Eurasia
**Cicuta douglasii** (Douglas's/Western Water Hemlock)

**Characteristics:**

- **General:**
  - Stout perennial herb from a taproot or cluster of tuberous roots

- **Flowers & Fruit:**
  - Inflorescence of several to many small, compact clusters forming several compound umbels; flowers white to greenish; involucral bracts mostly lacking
  - Fruit egg-shaped to orbicular, 2-4 mm long, glabrous, corky-thickened; ribs unequal, with a narrow raised border on edge of dark intervals

- **Stems & Leaves:**
  - Stems solitary or few together from a tuberous-thickened and chambered base, leafy, glabrous, 0.5-2 m tall
  - Basal and stem leaves divided 1-3 times, leaflets 3-4 times as long as broad, lanceolate to narrowly oblong or elliptic, these sharply pointed and toothed, 4-7 mm long; lateral veins ending at base of the teeth

**Locations & Habitat:**

- Habitat wet stream edges, ditches and marshes in the lowland, steppe and montane zones; common throughout BC except the Queen Charlotte Islands; N to AK and S to ID, NV and CA

**Notes:**

- **PLANT EXTREMELY POISONOUS; CAN BE FATAL IF INGESTED**
  - Fun Fact: This is the most poisonous plant native to NA; death can occur within fifteen minutes of ingesting this plant’s toxin

- Native to Canada
Cicuta maculata (Spotted Cowbane/Water Hemlock)

Characteristics:

- **General:**
  - Stout perennial herb from a taproot or cluster of tuberous roots

- **Flowers & Fruit:**
  - Inflorescence of several to many small compact clusters aggregated in several compound umbels; flowers white to greenish, small, numerous; involucral bracts mostly lacking
  - Fruit egg-shaped to orbicular, 2-4 mm long, longer than wide, without raised border on edge of the dark interval

- **Stems & Leaves:**
  - Stems solitary or few together from a tuberous-thickened chambered base, glabrous, 0.5-2 m tall
  - Stem leaves compound, divided 1-3 times without bulbils in axils; leaflets more than 5 times as long as broad, linear to narrowly lanceolate; midvein on upper leaflet surface glabrous

Locations & Habitat:

- Habitat wet stream sides, ditches and marshes in the steppe and montane zones; common in BC E of the Coast-Cascade Mountains; N to AK, YT and NT, E to ON and S to TX and MX

Notes:

- Native to Canada
- A single collection of var. maculata is known from SW BC (Mulligan 1980). It is distinguished from var. angustifolia by its longer styles, elongate fruit and broader stem leaflets
**Conium maculatum (Poison Hemlock)**

**Characteristics:**
- **General:**
  - Robust biennial herb from a stout whitish taproot, with a disagreeable odour especially when crushed
- **Flowers & Fruit:**
  - Inflorescence terminal and axillary in many compound umbels; flowers white; involucral bracts small, lance-shaped
  - Fruits egg-shaped, somewhat flattened, 2-2.5 mm long, glabrous, with prominent, raised, often wavy ribs
- **Stems & Leaves:**
  - Stems erect, freely branched, purple-blotched, hollow, 0.5-3 m tall, glabrous, glaucous
  - Stem leaves pinnately dissected, fernlike, with small ultimate segments giving the plant a lacy appearance; leaf stalks enlarged and sheathing at the base, blades 15-30 cm long

**Locations & Habitat:**
- 3 sites in CSRD in Salmon Arm IPMA
- Locally common in SW BC (known in the Victoria area and Vancouver) rare in SC BC
- Habitat wet to mesic ditches and disturbed sites in the lowland zone

**Notes:**
- **PLANT EXTREMELY POISONOUS; CAN BE FATAL IF INGESTED**
  - Fun Fact: This is the plant that Socrates used to kill himself
- Introduced from Europe
**Daucus carota** (Wild Carrot/Queen Anne’s Lace)

**Characteristics:**

- **General:**
  - Coarse biennial herb from a well-developed, whitish, bitter taproot

- **Flowers & Fruit:**
  - Inflorescence of numerous, compound umbels with small compact heads; flowers white or yellowish (but the central flower of the umbel commonly purple or pink); involucral bracts with paper-like edges below; segments threadlike to awl-shaped
  - Fruit egg-shaped, 3-4 mm long, ribbed and armed with barbed prickles along alternate ribs
  - Inflorescence narrower in fruit than in flower, and with outer, longer spokes arching inwards, producing a "bird's nest" effect

- **Stems & Leaves:**
  - Stems single, hairy throughout to nearly glabrous, 20-120 cm tall
  - Basal and stem leaves pinnately dissected with small, narrow ultimate segments, fernlike, with short stalks, the blades 5-15 cm long

**Locations & Habitat:**

- 10 sites in CSRD in SA, Rev, and Golden IMPA’s
- Habitat on roadsides, fields and waste places in the lowland zone; common in SW BC, known from SE Vancouver Island, the Gulf Islands and adjacent mainland, also known from Vernon

**Notes:**

- Introduced from Eurasia
*Heracleum mantegazzianum* (Giant Cow Parsnip/Giant Hogweed)

**Characteristics:**

- **General:**
  - Similar to *H. lanatum* except biennial to perennial

- **Flowers & Fruit:**
  - Inflorescence, larger ones, 20-50 cm in diameter, rays 50-150; petals white
  - Fruit blunt and rounded toward base

- **Stems & Leaves:**
  - Stem (1.5) 2-4.5 m tall, up to 10 cm in diameter, usually with purple blotches
  - Leaves up to 3 m long, blade to 2.6 cm wide, ternately or pinnately divided, lateral segments pinnately lobed, short-hairy below

**Locations & Habitat:**

- 2 sites in CSRD in SA IPMA
- Habitat wet to moist disturbed areas in the lowlands, garden escape, well established in Vancouver, North Vancouver, West Vancouver

**Notes:**

- **PLANT HIGHLY TOXIC; CAN CAUSE SEVERE BURNS DUE TO PHOTOPHYTOTOXIN**
- Introduced from Asia
**Heracleum maximum** (Cow Parsnip)

**Characteristics:**
- **General:**
  - Perennial
- **Flowers & Fruit:**
  - Inflorescence usually 10-20 cm in diameter, woolly or long-hairy, peduncle 5-20 cm long, involucre bracts 5-10, decidual, narrow, 5-20 mm long, involucel bractlets similar to involucre bracts, rays 15-30, 5-10 cm long; petals obovate, white
  - Fruit 8-12 mm long, obovate to heart-shaped, narrowed toward base, flat, winged, glabrous or hairy
- **Stems & Leaves:**
  - Stem 1-3 m tall, hairs woolly
  - Leaves with widely sheathing petioles 10-40 cm long, upper sheaths enlarged, bladeless, blade 20-50 cm wide, round to kidney-shaped, leaflets 3, 10-40 cm wide, ovate to round, lobed or toothed, usually hairy

**Locations & Habitat:**
- Habitat wet to moist areas from the lowland to the alpine zone. Common throughout BC; amphiberiingian, E to NF and S to GA, NM and CA; E. Asia

**Notes:**
- **PLANT POISONOUS; CAN CAUSE MILD TO MODERATE BURNS DUE TO PHOTOPHTOTOXIN**
- Native to Canada
Ligusticum canbyi (Canby's Lovage/Liquorice Root)

Characteristics:
- **General:**
  - Stout perennial herb from a thick taproot
- **Flowers & Fruit:**
  - Inflorescence in small compound umbels with 7-14 compact heads; flowers white, rays of terminal umbels 15-40; involucral bracts lacking
  - Fruits oblong to elliptic, 4-5 mm long, glabrous, with narrowly winged ribs
- **Stems & Leaves:**
  - Stems 50-120 cm tall, branching, glabrous, leafy with fibrous remains of leaf sheaths at the base
  - Leaves compound, mostly basal, divided into distinct toothed leaflets up to 5 cm long; stem leaves reduced but at least 1 fairly well-developed

Locations & Habitat:
- Habitat moist streambanks, slopes and meadows in the montane zone; locally frequent in SC and SE BC; S to ID, MT and NE OR

Notes:
- Native to Canada
Myrrhis odorata (Sweet Cicely/Anise)

Characteristics:

- General:
  - Perennial herb from a long, slender taproot, softly short-hairy

- Flowers & Fruit:
  - Inflorescence of compound umbels; flowers white; involucels well-developed with egg-shaped, toothed bractlets or the bractlets lacking
  - Fruits oblong to elliptic, 3 times as long as wide, 15-25 mm long, slightly compressed laterally, glabrous or minutely bristly, ribs with well-developed ridges; beaks short

- Stems & Leaves:
  - Stems erect, hollow, 30-180 cm tall, leafy
  - Leaves mostly basal, 2-4 times pinnately-cut, the lobes oblong-lanceolate, deeply toothed, with whitish patches

Locations & Habitat:

- No sites in CSRD
- Habitat mesic to dry roadsides, fields and waste places in the lowland zone; rare in SW BC, known only from the Vancouver area

Notes:

- Introduced from Eurasia
Osmorhiza berteroii (Mountain Sweet Cicely)

Characteristics:
- **General:**
  - Perennial herb from a well-developed taproot, sometimes below a slightly branched stem-base
- **Flowers & Fruit:**
  - Inflorescence of loose compound umbels; flowers greenish-white, sometimes pink or purple, inconspicuous; stalks short when flowering becoming longer at maturity; involucels lacking
  - Fruits linear-oblong, needle-like, 12-22 mm long, black, bristly hairy basally, narrowing to a beak, often catching on clothing or fur
- **Stems & Leaves:**
  - Stems solitary or sometimes 2-3, 0.3-1 m tall, branching
  - Basal and stem leaves twice divided into 3’s, leaflets coarsely toothed, 2-9 cm long, 1-5.5 cm wide, more or less hairy, thin; basal leaves several with long stalks; stem leaves 1-3 with short stalks

Locations & Habitat:
- Habitat mesic open forests and forest margins in the lowland and montane zones; common throughout BC; N to AK, E to NF and S to SD, CO, AZ and CA, disjunct to S. America

Notes:
- Native to Canada
**Pastinaca sativa** (Common/Wild Parsnip)

**Characteristics:**
- **General:**
  - Stout, aromatic biennial herb from a stout taproot
- **Flowers & Fruit:**
  - Inflorescence of compound umbels on terminal and lateral stalks; flowers yellow; spokes 15-25, unequal
  - Fruits broadly elliptic, 5-6 mm long, strongly flattened crosswise, glabrous
- **Stems & Leaves:**
  - Stems erect, 0.3-1.8 m tall
  - Leaves pinnately compound, stem leaves progressively reduced, basal leaves up to 50 cm long and nearly half as wide; leaflets pinnately cleft

**Locations & Habitat:**
- Fields, roadsides and waste places in the lowland zone; rare in SW BC

**Notes:**
- Introduced from Europe
Perideridia gairdneri (Gairdner's Yampah/Yampa)

**Characteristics:**
- **General:**
  - Slender perennial herb from tuberous-thickened and often clustered edible root, often fascicled, glabrous
- **Flowers & Fruit:**
  - Inflorescence of compound umbels; flowers terminal and lateral; spokes up to 6 cm long at maturity; flowers white or pink; involucel bractlets bristly or obsolete
  - Fruits roundish, 2-3 mm long and wide, slightly flattened, glabrous, prominent ribs
- **Stems & Leaves:**
  - Stems solitary, 0.4-1.2 m tall
  - Several leaves, well distributed along stem, divided 1-3 times, elongate; basal leaf sheaths not much inflated; ultimate segments long and narrow

**Locations & Habitat:**
- Habitat moist to dry meadows and woodlands in the lowland and montane zones; infrequent in SE and SW BC (known from SE Vancouver Island and the Gulf Islands), also rare in SC BC; E to SK and S to SD, CO, NM and CA

**Notes:**
- Origin unknown
*Sium suave* (Hemlock-Water Parsnip)

**Characteristics:**

- **General:**
  - Terrestrial to semi-aquatic perennial herb from a very short, erect stem-base (not chambered) with fibrous roots that sometimes are tuberous-thickened

- **Flowers & Fruit:**
  - Inflorescence of compound umbels; flowers white, small; calyx teeth minute or obsolete; involucel bractlets 6-10, narrow, reflexed
  - Fruits oval to elliptic, 2-3 mm long, prominently ribbed

- **Stems & Leaves:**
  - Stems solitary, 0.5-1.2 m tall, stout, hollow, strongly ridged, generally branched above
  - Stem leaves pinnately compound; leaf stalks with sheathing bases, blades 2-9 cm long, 1.5-10 (20) mm wide, divided into 7-15 leaflets that are lance-shaped to linear and toothed; submerged leaves much more finely divided; primary lateral veins of the leaflets not directed towards the base of the teeth

**Locations & Habitat:**

- Habitat wet stream sides, swamps, marshes, lake and pond shores in the lowland and montane zones; common throughout BC except Queen Charlotte Islands and adjacent coast; N to AK, YT and NT, E to NF and S to FL, VA, KS and CA

**Notes:**

- Native to Canada