

Key to species on spring Bear Island lists

1. Reproductive organs in cones. Trees with resinous, needle-like leaves. *Pinus virginiana*
1. Reproductive organs in flowers. Various but not exactly as above. 2.
 2. Leaf venation generally parallel; floral parts usually in 3s. "Monocots."
 3. Inflorescence a spathe (cylindrical naked axis covered with minute flowers) surrounded by a single large bract (spadix). *Arisaema triphyllum*
 3. Inflorescence not as above. 4.
 4. Perianth absent or inconspicuous; inflorescence of one or more spikelets; leaves linear or narrowly lanceolate.
 5. Perianth inconspicuous, of green or brown scales; spikes arranged in an umbel. *Luzula echinata*
 5. Perianth absent; spikelets arranged in a panicle or raceme.
 6. Leaves and bracts 3-ranked. *Carex* (Cyperaceae)
 6. Leaves and bracts 2-ranked. Poaceae
 4. Perianth conspicuous; flowers not in spikelets; leaves broad (except in *Muscari*).
 7. Woody vines with prominent prickles. *Smilax rotundifolia*
 7. Herbaceous, unarmed.
 8. Leaves 3, venation reticulate. *Trillium sessile*
 8. Leaves indefinite in number; venation parallel.
 9. Leaves all basal.
 10. Perianth with a prominent corona. *Narcissus* sp.
 10. Corona absent.
 11. Leaves linear. *Muscari botryoides*
 11. Leaves broad. *Erythronium*
 12. Perianth white. *Erythronium albidum*
 12. Perianth yellow. *Erythronium americanum*
 9. Leaves all cauline.
 12. Flowers white, in terminal panicles. *Maianthemum racemosum*
 12. Flowers yellow or greenish, solitary or paired in leaf axils.
 13. Tepals united for most of their length; flowers paired. *Polygonatum biflorum*
 13. Tepals free; flowers solitary. *Uvularia sessilifolia*
 2. Leaf venation generally reticulate; floral parts usually in 4s or 5s. "Dicots."
 14. Evergreen succulents of rock outcrops.
 15. Spiny; stems succulent. *Opuntia humifusa*
 15. Unarmed; leaves succulent. *Sedum ternatum*
 14. Not succulent, rarely evergreen.
 16. Trees, shrubs, or woody vines.
 17. Petals united; calyx and corolla always well-defined. **1. Sympetalous woody dicots.**
 17. Petals separate or absent. **2. Apetalous or polypetalous woody dicots**
 16. Herbaceous plants.
 17. Petals united to form a tube, at least below.
 18. Flowers in heads, enclosed in a tight involucre of bracts. Asteraceae (all key under **4. Sympetalous actinomorphic herbs.**)
 18. Flowers not in heads.
 19. Corolla strongly zygomorphic, usually bilabiate. **3. Sympetalous zygomorphic herbs.**
 19. Corolla radially symmetrical. **4. Sympetalous actinomorphic herbs.**
 17. Petals free to base.
 20. Corolla bilaterally symmetrical. **5. Zygomorphic polypetalous herbs**
 20. Corolla radially symmetrical. **6. Actinomorphic polypetalous herbs**

MONOCOT FAMILIES

CYPERACEAE

Note: Some of the *Carex* determinations still have to be confirmed.

1. Styles 2; perigynium lenticular and flattened.
 2. Leaves 1-2 mm wide; perigynia in several clusters along upper length of stem. *Carex rosea*
 2. Leaves 2-4 mm wide; perigynia in one tight cluster at tip of stem. *Carex cephalophora*
1. Styles 3; perigynium trigonous.
 2. Perigynium glabrous (sometimes minutely papillose)
 3. Pistillate flowers crowded.
 4. Leaves 4-18 mm broad; culms lax, spreading. *Carex careyana*
 4. Leaves 1-3 mm broad; culms usually upright. *Carex woodii*
 3. Pistillate flowers remote.
 5. Pistillate spikes 1-4-flowered, drooping on long peduncles. *Carex laxiculmis*
 5. Pistillate spikes 4-20-flowered; peduncles erect or ascending.
 6. Pistillate scales acute to acuminate; anthers 0.5-1.5 mm long; achene beak 1.5-4 mm long. *Carex jamesii*
 6. Pistillate scales awned; anthers 2-3 mm long; achene beak ca 1/2 mm long. *Carex amphibola*
 2. Perigynium pubescent.
 6. Plant usually less than 20 cm tall, its base strongly fibrous from old disintegrating leaves.
 7. All pistillate spikes within 1 cm of staminate spike. *Carex nigromarginata*
 7. Some pistillate spikes solitary, low on stem, others within 1 cm of staminate spike. *Carex umbellata*
 6. Plant usually 20-45 cm tall, its base scarcely fibrous.
 8. Perigynium ellipsoidal, ca 3 times as long as wide. *Carex albicans*
 8. Perigynium obovoid, ca twice as long as wide. *Carex pennsylvanica*

POACEAE (GRAMINEAE)

1. Flowers 1 per spikelet.
 2. Leaves linear; panicle dense, spike-like, the spikelets crowded. *Anthoxanthum odoratum*
 2. Leaves lanceolate; panicle open, the spikelets well separated. *Dichanthelium ravenelii*
1. Flowers 2-several per spikelet.
 3. Spikelets rounded in cross section. *Melica mutica*
 3. Spikelets keeled. *Poa*
 4. Plants spreading by elongate stolons. *Poa cuspidata*
 4. Plants without spreading stolons.
 5. Ligule 4-6 mm long; coarse perennials with large inflorescences, lower inflorescence branches usually ascending. *Poa trivialis*
 5. Ligule ca 1 mm long.
 6. Soft annuals, panicles 1-8 cm long, spikelets tightly clustered, lower inflorescence branches usually ascending. *Poa annua*
 6. Coarse tufted perennials, panicles 10-20 cm long, spikelets not clustered, lower inflorescence branches usually reflexed. *Poa sylvestris*

DICOTS

1. Sympetalous woody dicots

1. Leaves opposite or whorled.
 2. Inflorescences terminal.
 3. Inflorescence surrounded by petaloid bracts; leaves entire, secondary veins turning aside before reaching margins. *Cornus florida*
 3. Inflorescence without prominent bracts; leaves toothed, secondary veins extending \pm straight to margins. *Viburnum*
 4. Leaves 3-lobed. *V. acerifolium*
 4. Leaves unlobed.
 5. Leaves finely toothed, secondary veins not especially prominent. *V. prunifolium*
 5. Leaves coarsely toothed, secondary veins deeply impressed. *V. rafinesqueanum*
 2. Inflorescences axillary.
 6. Leaves compound. *Fraxinus*
 7. Twigs glabrous. *F. americana*
 7. Twigs hairy. *F. pensylvanica*

- 6. Leaves simple.
 - 8. Flowers radially symmetrical; corolla-lobes threadlike. *Chionanthus virginicus*
 - 8. Flowers bilaterally symmetrical; corolla-lobes much broader. *Lonicera*
 - 9. Woody vines. *L. japonica*
 - 9. Shrubs.
 - 10. Leaves strongly acuminate. *L. maackii*
 - 10. Leaves broadly acute, obtuse, or mucronate. *L. xylostemon*
- 1. Leaves alternate.
 - 11. Trees.
 - 12. Corollas small, green, radially symmetrical. *Nyssa sylvatica*
 - 12. Corollas large, lavender, bilaterally symmetrical. *Paulownia tomentosa*
 - 11. Shrubs.
 - 13. Plants trailing; leaf bases cordate. *Epigaea repens*
 - 13. Plants erect or ascending; leaf bases not cordate.
 - 14. Ovary superior; corolla not urceolate, pure white or pink.
 - 15. Corolla tubular proximally, deeply lobed; stamens 5, projecting forward from the corolla. *Rhododendron periclymenoides*
 - 15. Corolla bowl-shaped, scarcely lobed; stamens 10, inserted in pockets in the corolla. *Kalmia latifolia*
 - 14. Ovary inferior; corolla urceolate, greenish.
 - 16. Underside of leaf glandular-dotted. *Gaylussacia baccata*
 - 16. Underside of leaf not glandular-dotted.
 - 17. Anthers exserted from corolla. *Vaccinium stamineum*
 - 17. Anthers immersed in corolla. *Vaccinium pallidum*

2. Apetalous or polypetalous woody dicots

- 1. Leaves opposite or whorled.
 - 2. Low shrubs with simple unlobed leaves.
 - 3. Flowers solitary in leaf axils; petals green, stamens 4. *Euonymus alata*
 - 3. Flowers in cymes (terminal and upper leaf axils); petals yellow, stamens many. *Hypericum prolificum*
 - 2. Small to large trees, leaves lobed or compound.
 - 4. Inflorescences terminal.
 - 5. Leaves simple and lobed; petals green. *Acer saccharum*
 - 5. Leaves 3-foliolate; petals white. *Staphylea trifolia*
 - 4. Inflorescences axillary.
 - 6. Flowers long-pedicellate, in long dangling inflorescences; leaves compound. *Acer negundo*
 - 6. Flowers sessile or subsessile, in dense clusters; leaves simple and lobed.
 - 7. Petals present; ovaries glabrous; branchlets spreading or ascending; leaves lobed less than halfway to base. *Acer rubrum*
 - 7. Petals none; ovaries villous; branchlets pendulous; leaves lobed more than halfway to base. *Acer saccharinum*
- 1. Leaves alternate.
 - 8. Inflorescences unisexual, at least male flowers sessile in pendulous catkins or glomerules (erect catkins in *Salix*).
 - 9. Leaves palmately lobed. Male and female inflorescences of one or more dense spherical glomerules. *Platanus occidentalis*
 - 9. Leaves lobed pinnately or unlobed. Male flowers in catkins (sometimes \pm globular in *Fagus*); female flowers various but not as above.
 - 10. Male and female flowers both numerous in elongate catkins.
 - 11. Secondary veins of leaves curving and not reaching margins.
 - 12. Leaves triangular. *Populus deltoides*
 - 12. Leaves linear. *Salix nigra*
 - 11. Secondary veins of leaves running straight to margins.
 - 13. Intact woody cone-like infructescences persisting from previous year. Shorelines. *Alnus serrulata*

13. Infructescences not woody, disintegrating on tree and not persisting. Understorey of woods.
14. Bark smooth. *Carpinus caroliniana*
14. Bark scaly. *Ostrya virginiana*
10. Male flowers in catkins; female inflorescences few-flowered.
15. Leaves compound. *Carya glabra*
15. Leaves simple, lobed or not.
16. Bark smooth. Terminal buds solitary. Male inflorescences subglomerate. *Fagus grandifolia*
16. Bark fissured with age. Terminal buds clustered. Male inflorescences elongate. *Quercus*
17. Leaves linear, entire, inrolled in bud. *Quercus phellos*
17. Leaves broader, lobed or crenate, imbricate in bud.
18. Leaves lobed, the lobes bristle-tipped.
19. Leaf blade lobed for 0.7-0.95 of its width, with 2-3(-4) lobes on each side. Tufts of hairs in vein axils large and conspicuous, each hair with 9-19 rays. *Quercus palustris*
19. Leaf blade lobed for 0.25-0.88 of its width, with 3-5 lobes on each side. Tufts of hairs in vein axils small and inconspicuous or absent, each hair with 5-9 rays. *Quercus rubra*
18. Leaves lobed or crenate, lobes or crenae rounded, without bristles.
20. Leaves crenate, with 8-12 lateral veins; bark grey, splitting into persistent ridges. *Quercus montana*
20. Leaves lobed, with (3-)4-6 lateral veins; bark grey or almost white, exfoliating as thin plates or scales.
21. Young growth pale green, covered with white deciduous tomentum; bark almost white, exfoliating as thin plates. *Quercus alba*
21. Young growth yellow, hairs yellow or brownish, spreading, persistent; bark grey, ridged and scaly. *Quercus stellata*
8. Inflorescences bisexual, not catkins or pendent glomerules (if inflorescence is pendent, then flowers pedicellate).
20. Leaves compound.
21. Low arching or prostrate brambles with prickly leaves and stems. *Rubus cf. flagellaris?*
21. Upright shrubs or trees or climbing vines, unarmed (with stipular spines only in *Robinia*).
22. Leaves 3-foliolate.
23. Small trees; leaflets undivided; stigmas 2. *Ptelea trifoliata*
23. Woody vines climbing by adventitious roots; leaflets deeply cleft; stigmas 3. *Toxicodendron radicans*
22. Leaves pinnately compound with many leaflets.
24. Trees with pendent inflorescences.
25. Foul-smelling trees with radially symmetrical greenish flowers. *Ailanthus altissima*
25. Odorless trees with white flowers that are strongly bilaterally symmetrical. *Robinia pseudoacacia*
24. Shrubs with erect inflorescences.
26. Twigs and petioles glabrous or finely puberulent. *Rhus glabra*
26. Twigs and petioles densely shaggy. *Rhus typhina*
20. Leaves simple.
27. Leaves 3-veined from base.
28. Ovaries numerous; leaves truncate. *Liriodendron tulipifera*
28. Ovary solitary; leaves rounded or acuminate.
29. Small trees; leaves rounded.
30. Flowers bilaterally symmetrical, petals pink. *Cercis canadensis*
30. Flowers radially symmetrical; petals green. *Sassafras albidum*
29. Large trees; leaves acuminate.
30. Stamens numerous; bark not corky; pedicels fused to bracts. *Tilia americana*
30. Stamens 5; bark covered with corky warts and ridges; pedicels without bracts. *Celtis*

occidentalis

- 27. Venation pinnate.
 - 31. Evergreen.
 - 31a. Low ground cover; leaf margins with blunt teeth. *Pachysandra terminalis*
 - 31a. Tall shrubs or trees; leaf margins spinose. *Ilex opaca*
 - 31. Deciduous; leaves unarmed.
 - 32. Petals green, brown, or purple-brown, ovaries not enclosed in a hypanthium.
 - 33. Flowers in sessile umbels in leaf axils; leaves toothed; canopy trees.
 - 34. Flowers on long drooping pedicels; fruit ciliate. *Ulmus americana*
 - 34. Flowers nearly sessile, tightly clustered; fruit glabrous. *Ulmus rubra*
 - 33. Flowers solitary or in clusters of 2-4; leaves entire; shrubs or small trees of understorey.
 - 35. Flowers large, solitary, purple-brown. *Asimina triloba*
 - 35. Flowers small, paired, greenish. *Lindera benzoin*
 - 32. Petals white, pink, or yellow, ovaries enclosed in a hypanthium.
 - 36. Flower yellow
 - 37. Shrubs unarmed. Hypanthium present, longer than sepals; petals none. *Dirca palustris*
 - 37. Shrubs spiny. Hypanthium absent; sepals and petals present, poorly differentiated. *Berberis thunbergii*
 - 36. Flower white or pink; petals present, much longer than hypanthium.
 - 37. Ovary and style 1 per flower.
 - 38. Inflorescence an elongate raceme. *Prunus serotina*
 - 38. Inflorescence an umbel.
 - 39. Flowers subtended only by bud-scales (leaves, if any, from different buds); sepals pubescent. *Prunus americana*
 - 39. Flowers subtended by reflexed scale-like green bracts; sepals glabrous. **Prunus avium*
 - 37. Ovaries and styles 2-5 per flower.
 - 40. Petals obovate; flowers in short, umbel-like racemes; leaf primordia inrolled in bud.
 - 41. Anthers yellow; leaves densely tomentose. **Malus sylvestris*
 - 41. Anthers red; leaves glabrous or weakly villous.
 - 42. Styles 2-3; young plants very thorny. **Pyrus calleryana*
 - 42. Styles 5; young plants seldom thorny. **Pyrus communis*
 - 40. Petals narrow, oblanceolate; flowers in longer racemes; leaf primordia folded along midrib in bud.
 - 43. Inflorescence ascending. *Amelanchier canadensis*
 - 43. Inflorescence lax, horizontal or pendent.
 - 44. Shrubs stoloniferous, colonial, to 2 m tall. *Amelanchier nantucketensis* [not confirmed]
 - 44. Shrubs not colonial, usually taller.
 - 45. Undersides of leaves tomentose. *Amelanchier arborea*
 - 45. Undersides of leaves glabrous (sometimes sparingly pubescent when young). *Amelanchier laevis*

3. Sympetalous zygomorphic herbs.

- 1. Plant white, yellow, or brown, parasitic.
 - 2. Yellow or yellow-brown; stems thick, scaly; stamens exserted. *Conopholis americana*
 - 2. White; stems slender, naked; stamens immersed. *Orobanche uniflora*
- 1. Plant green, photosynthetic.
 - 3. Submerged aquatics. *Gratiola virginiana*
 - 3. Terrestrial plants.
 - 4. Stamens 4; crushed tissue mint-scented.
 - 5. Stems trailing and mat-forming; leaf blade reniform, all leaves green. **Glechoma hederacea*
 - 5. Stems erect; leaf blade triangular, upper leaves purple. **Lamium purpureum*

- 4. Stamens 2; crushed tissue not mint-scented.
 - 6. Corollas white. *Valerianella locusta*
 - 6. Corollas blue.
 - 7. Leaves wider than long, 3-5-lobed. **Veronica hederifolia*
 - 7. Leaves longer than wide, unlobed. *Veronica persica*

4. Sympetalous actinomorphic herbs.

- 1. Inflorescence a head. Asteraceae
 - 3. All corollas ligulate (the tube split down one side to form a flat strap).
 - 4. Involucre 1.5-2.5 cm long, outermost phyllaries reflexed; heads solitary on an unbranched scape. *Taraxacum officinale*
 - 4. Involucre 3-10 mm long, all phyllaries appressed; stem often branched, heads often more than one per stem.
 - 5. Less than 1 foot high; pappus of alternating scales and bristles; outer leaves entire, inner lobed, all green. *Krigia virginica*
 - 5. 1-3 feet high; pappus of bristles only.
 - 5a. All leaves entire, leaf veins and underside purple. *Hieracium venosum*
 - 5a. Leaves lobed (sometimes merely toothed), leaves green. *Youngia japonica*
 - 3. Corollas tubular, or corollas of central flowers (disk flowers) tubular surrounded by a ring of peripheral flowers (rays) having flat corollas.
 - 6. Head discoid; phyllaries straw-coloured. *Antennaria plantaginifolia*
 - 6. Head radiate; phyllaries green.
 - 7. Leaves opposite.
 - 7a. Leaves sessile, sometimes with a very short petiole; heads 2-16 per plant, each with 10-15 rays; pappus a ring of filaments. *Arnica acaulis*
 - 7a. Leaves long-petiolate; heads solitary, usually with 5 rays; pappus a toothed crown. *Chrysogonum virginianum*
 - 7. Leaves alternate.
 - 8. Rays white or pinkish. *Erigeron philadelphicus*
 - 8. Rays yellow.
 - 9. Large leaves basal and cauline. *Senecio aureus* [= *Packera*]
 - 9. Large leaves basal, white-tomentose beneath; heads on scaly unbranched pedicels. *Tussilago farfara*
- 1. Inflorescence not a head.
 - 10. Leaves opposite or apparently whorled.
 - 11. Corolla strongly salverform. *Phlox*
 - 12. Leaves subulate. *Phlox subulata*
 - 12. Leaves laminate. *Phlox divaricata*
 - 11. Corolla not salverform.
 - 13. Leaves whorled (or apparently so).
 - 14. Inflorescence axillary; stems reclining, covered with retrorse teeth. **Galium aparine*
 - 14. Inflorescence terminal; stems erect, without teeth. *Chimaphila umbellata*
 - 13. Stipules small and different from the opposite leaves.
 - 15. Evergreen. *Mitchella repens*
 - 15. Green only in the warmer months. *Houstonia caerulea*
 - 10. Leaves alternate.
 - 16. Flowers solitary, opposite the leaves. *Ellisia nyctelea*
 - 16. Flowers in helicoid inflorescences.
 - 17. Leaves entire.
 - 18. Corolla blue or pink. *Mertensia virginica*
 - 18. Corolla white. *Lithospermum* sp.
 - 17. Leaves parted or compound.
 - 19. Petals fimbriate. *Phacelia purshii*
 - 19. Petals entire.
 - 20. Filaments glabrous, shorter than corolla tube. *Phacelia covillei*
 - 20. Filaments pubescent, longer than corolla tube.

- 21. Inflorescence with a well-developed axis; stem leaves small, not overtopping inflorescences, pinnately lobed. *Phacelia dubia*
- 21. Inflorescence branching; stem leaves large, overtopping inflorescences, ± palmately lobed. *Hydrophyllum canadense*

5. Zygomorphic polypetalous herbs

- 1. Petals overlapping.
 - 2. Leaves cauline; flowers yellow, spurred on one side or not spurred, with one plane of symmetry.
 - 3. Flowers yellow, spurred on one side. *Corydalis flavula*
 - 3. Flowers white or purplish, not spurred.
 - 3a. Inflorescence much longer than leaves. *Vicia caroliniana*
 - 3a. Inflorescence much shorter than leaves *Vicia sativa*
 - 2. Leaves basal; flowers white, spurred on both sides, with two planes of symmetry. *Dicentra*
 - 4. Bases of corolla prolonged strongly backward into long spurs. *Dicentra cucullaria*
 - 4. Bases of corolla rounded, barely prolonged into shallow sacs. *Dicentra canadensis*
- 1. Petals spreading.
 - 5. Corolla green, petal blades ca the same size. *Hybanthus concolor*
 - 5. Corolla white, yellow, or blue, petal blades conspicuously different in size. *Viola*
 - 6. Plant acaulescent, all leaves basal; corolla usually deep blue.
 - 7. Leaves cordate, ca as wide as long, margins finely crenate. *Viola sororia*
 - 7. Leaves lanceolate, much longer than wide, with large teeth or lobes near base. *Viola sagittata*
 - 6. Leaves cauline; corolla white, yellow, or pale blue.
 - 8. Corolla yellow; stipules entire or crenulate. *Viola pubescens*
 - 8. Corolla white, pale blue or creamy; stipules strongly toothed or lobed
 - 9. Stipules pinnately lobed in lower half, upper half entire; corolla pale blue or creamy. *Viola bicolor*
 - 9. Stipules strongly toothed for their whole length; corolla white. *Viola striata*

6. Actinomorphic polypetalous herbs

- 1. Flowers with several separate ovaries.
 - 2. Petals strongly spurred, red with yellow mouths. *Aquilegia canadensis*
 - 2. Petals plane, never red.
 - 3. Petals white or pink.
 - 4. Inflorescence a raceme; leaves all basal.
 - 5. Leaves entire or toothed; stamens 10. *Saxifraga virginiana*
 - 5. Leaves palmately lobed; stamens 5. *Heuchera americana*
 - 4. Flowers solitary or cymose; cauline leaves present (calyx-like in *Anemone americana*).
 - 6. Leaves compound; stigma sessile. *Thalictrum thalictroides* [*Anemonella*]
 - 6. Leaves lobed or parted; stigma terminating a short style.
 - 7. Basal leaves evergreen; involucre leaves sepal-like. *Anemone americana* [*Hepatica*]
 - 7. Basal leaves seasonal; involucre leaves deeply lobed, well separated from flowers. *Anemone quinquefolia*
 - 3. Petals yellow.
 - 8. Flower perigynous, subtended by an epicalyx of small bracts; stem reclining or prostrate; leaves 3-5-foliolate.
 - 9. Leaves 3-foliolate; bractlets 3-lobed. **Duchesnea indica*
 - 9. Leaves 5-foliolate; bractlets unlobed. *Potentilla canadensis*
 - 8. Flower hypogynous, without an epicalyx; stem erect or nearly so; leaves otherwise. *Ranunculus*
 - 10. All leaves undivided, merely crenate; sepals 3; stigma sessile. **Ranunculus ficaria*
 - 10. At least stem leaves deeply parted; sepals 5; stigma stigma terminating a short style.
 - 11. Basal leaves undivided; petals small and inconspicuous. *Ranunculus abortivus*
 - 11. All leaves deeply parted or compound; petals showy.
 - 12. Basal leaves deeply parted. *Ranunculus sceleratus*
 - 12. Basal leaves compound.
 - 13. Base of stem bulbous. **Ranunculus bulbosus*
 - 13. Base of stem not bulbous. *Ranunculus hispidus* var. *nitidus*

1. Flowers with a single ovary.
 13. Stem long-creeping and rooting; leaves evergreen. *Asarum canadense*
 13. Stem erect or ascending, or plant acaulescent; leaves seasonal.
 14. Inflorescence a terminal leafless raceme.
 15. Fruit discoid or obcordate, scarcely longer than wide.
 16. Fruit obcordate. **Capsella bursa-pastoris*
 16. Fruit discoid.
 17. Stem leaves with auriculate bases. **Lepidium campestre*
 17. Stem leaves tapering to base. *Lepidium virginicum*
 15. Fruit cylindrical, several times as long as wide.
 18. Petals yellow.
 19. Stem leaves deeply pinnately lobed, bases not clasping. **Barbarea vulgaris*
 19. Stem leaves deeply toothed or weakly pinnately lobed, bases clasping. **Erysimum repandum*
 18. Petals white or greenish.
 20. Hairs branched.
 21. Lower leaves toothed. *Arabis laevigata*
 21. Lower leaves pinnately lobed. *Arabidopsis lyrata*
 20. Hairs never branched.
 22. Leaves entire or toothed.
 23. Leaves with strong garlic odor when crushed. **Alliaria petiolata*
 23. Leaves without garlic odor. *Cardamine bulbosa*
 22. Leaves deeply parted or compound.
 24. Leaves palmately 3-5-parted or 3-5 foliolate.
 25. Glabrous; teeth of leaflets short, rounded. *Cardamine angustata*
 25. Hairy; teeth of leaflets long, acute. *Cardamine concatenata*
 24. Leaves pinnately parted or compound.
 26. Petioles of stem leaves ciliate at base; most leaves basal. **Cardamine hirsuta*
 26. Petioles of stem leaves not ciliate at base; most leaves cauline.
 27. Stems ± hispid at base; terminal leaflet usually broader than lateral leaflets. *Cardamine pennsylvanica*
 27. Stems glabrous; terminal and lateral leaflets similar. *Cardamine arenicola*
 14. Inflorescence otherwise.
 27. Corolla yellow; leaves 3-foliate.
 28. Flowers small; inflorescences terminal compound umbels. *Zizia aurea*
 28. Flowers showy; inflorescences axillary simple umbels.
 29. Stems erect or ascending, rooting only at base; stipules small, green. *Oxalis stricta*?
 29. Stems creeping and rooting at nodes; stipules large, purple or brown. *Oxalis corniculata*
 27. Corolla white or purple; leaves various.
 29. Leaves basal, flowers scapose (sometimes 1-2 stem leaves in *Podophyllum*).
 30. Leaves simple and lobed.
 31. Leaves peltate. *Podophyllum peltatum*
 31. Leaves not peltate. *Sanguinaria canadensis*
 30. Leaves compound.
 32. Petals 8, white; leaves 2-foliate, not sour. *Jeffersonia diphylla*
 32. Petals 5, purple, rarely white; leaves 3-foliate, very sour. *Oxalis violacea*
 29. Leaves cauline or basal and cauline; flowers not scapose.
 33. Inflorescence a compound umbel.
 34. Plant glabrous; fruit ca as wide as long. *Erigenia bulbosa*
 34. Plant pubescent; fruit much longer than wide.
 35. Hairs spreading; stipules ciliate on margins only. *Osmorhiza claytonii*
 35. Hairs appressed; stipules densely soft-hairy all over. *Osmorhiza longistylis*

- 33. Inflorescence not an umbel.
 - 36. Sepals 2 or 3.
 - 37. Sepals 2, petals 5, pink; leaves linear and undivided. *Claytonia virginica*
 - 37. Sepals 3, petals 3, white; leaves compound. *Floerkea proserpinacoides*
 - 36. Sepals 5.
 - 38. Leaves alternate.
 - 39. Leaves deeply parted; corollas purple. *Geranium maculatum*
 - 39. Leaves undivided; corollas white. *Comandra umbellata*
 - 38. Leaves opposite.
 - 40. Sepals fused into a ± united tube; petals white or pink. *Silene caroliniana*
 - 40. Sepals separate; petals white.
 - 41. Styles 3.
 - 42. Leaves petiolate, 1-3 cm long; stem cylindrical. **Stellaria media*
 - 42. Leaves subsessile, 2-9 cm long; stem 4-angled. *Stellaria pubera*
 - 41. Styles 5.
 - 43. Plants annual, all shoots producing flowers. Leaves elliptical, rounded or obtuse, margin long-ciliate. **Cerastium glomeratum* (= *C. viscosum* auct.)
 - 43. Plants perennial, often with non-flowering shoots. Leaves linear to narrowly ovate, acute to acuminate, leaves pubescent but margin not ciliate.
 - 44. Petals longer than sepals. *Cerastium arvense*
 - 44. Petals and sepals equal in length. **Cerastium fontanum* (= *C. vulgare* auct.)