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 cephalaphora
- 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, often drooping on long peduncles; xxx. Carex laxiculmis
 - 5. Pistillate spikes 4-20-flowered, androgynous spikes often present; peduncles erect or ascending; xxx.
 - 6. xxx. Carex jamesii
 - 6. xxx. 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. xxx. Carex albicans
 - 8. xxx. Carex pensylvanica

POACEAE (GRAMINEAE)

- 1. Flowers 1 per spikelet.
 - 2. Leaves linear; panicle dense, spikelike, 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 petalloid bracts; leaves entire, secondary veins turning aside before reaching margins. *Cornus florida*
 - 3. Inflorescence without prominent bracts; leaves toothed, secondary veins extending ± 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 ± 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; sepalsand 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 receme. 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 ranunculacea*
 - 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 lanceolateate, 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 virginiensis
 - 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; involucral leaves sepal-like. Anemone americana [Hepatica]
 - 7. Basal leaves seasonal; involucral 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 pensylvanica*
 - 27. Stems glabrous; terminal and lateral leaflets similar. *Cardamine arenicola*
 - 14. Inflorescence otherwise.
 - 27. Corolla yellow; leaves 3-foliolate.
 - 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-foliolate, not sour. Jeffersonia diphylla
 - 32. Petals 5, purple, rarely white; leaves 3-foliolate, 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.)