

CHAMPLAIN HILLS BUDS 1:
VIBURNUMS TO LOCUST

● = A COMMON SPECIES ● = A DRY-RICH INDICATOR

ADOXACEAE, MOSCHATTEL FAMILY			ANACARDACEAE, SUMAC FAMILY			BERBERIDACEAE, BARBERRY FAMILY		BETULACEAE, BIRCH FAMILY			
Viburnums, <i>Viburnum</i>			Sumacs, <i>Rhus</i>					Birches			
duckbill buds pink-gray Nannyberry <i>Viburnum lentago</i>	twigs hairy buds curved in Maple-leaved viburnum <i>Viburnum acerifolium</i>	scale edges fringed twigs smooth buds angled out Rafinesque's viburnum <i>Viburnum rafinesquianum</i>	hairy fat twigs scars surround buds Staghorn sumac <i>Rhus typhina</i>	male catkins buds not visible Fragrant sumac <i>Rhus aromatica</i>	elongate buds viny or shrubby Poison ivy <i>Toxicodendron radicans</i>	gray leaf bases persist thorns often in threes Common barberry* <i>Berberis vulgaris</i>	brown thorns mostly single Japanese barberry* <i>Berberis thunbergii</i>	sharp pointed buds wintergreen smell Yellow birch <i>Betula alleghaniensis</i>	gummy buds bumpy twigs Black birch <i>Betula lenta</i>	gray birch <i>Betula populifolia</i>	hairy twigs Paper birch <i>Betula papyrifera</i>
BETULACEAE, BIRCH FAMILY				CAPRIFOLIACEAE, HONEYSUCKLE FAMILY							
				Honeysuckles & relatives, <i>Lonicera</i> , <i>Diervilla</i> , <i>Symphoricarpos</i>							
4 scales rounded buds Beaked hazelnut <i>Corylus cornuta</i>	6 or more scales dark twigs & buds American hazelnut <i>Corylus americana</i>	scales with white edges washboard grooves on scales Musclewood <i>Carpinus caroliniana</i>	tan twigs & buds Hop hornbeam <i>Ostrya virginiana</i>	blunt, fleshy, mottled scales buds point out Canada honeysuckle <i>Lonicera canadensis</i>	long needle-pointed scales viny Hairy honeysuckle <i>Lonicera hirsuta</i>	smooth twigs papery collar Limber honeysuckle <i>Lonicera dioica</i>	hollow twigs extra buds small shelves under buds tall shrub Morrow's honeysuckle <i>Lonicera morrowii</i>	low shrub large shelves under buds Snowberry <i>Symphoricarpos albus</i>	long pointed buds, flat against twig ridge on twig Bush honeysuckle <i>Diervilla lonicera</i>	big flower buds smelly brown lenticels Red elderberry <i>Sambucus racemosa</i>	
CELASTRACEAE, BITTERSWEET FAMILY		CORNACEAE, DOGWOOD FAMILY		ELAEGNACEAE, OLEASTER FAMILY		ERICACEAE, HEATH FAMILY			FABACEAE, BEAN FAMILY		
blunt scales American bittersweet <i>Celastrus scandens</i>	tan twigs elevated scar Gray dogwood <i>Cornus foemina</i>	dark blotches Round-leaved dogwood <i>Cornus rugosa</i>	single buds Autumn olive <i>Elaeagnus umbellata*</i>	flattened buds with stalks scales with brown centers Buffalo berry <i>Shepherdia canadensis</i>	yellow resin dots inside buds furry twigs Lowbush blueberries <i>Vaccinium angustifolium</i> & <i>pallidum</i>	tall, often furry bumpy twigs Highbush blueberry <i>Vaccinium corymbosum</i>	red scales, fused together Maleberry <i>Lyonia ligustrina</i>	furry twigs & buds several buds at tip Pinxter flower <i>Rhododendron prionophyllum</i>	scar on shelf Leadplant* <i>Amorpha fruticosa</i>	often has thorns buds hidden below scar Black locust* <i>Robinia pseudoacacia</i>	

Three charts, showing 97 deciduous wood plants from the rocky hills of the Champlain Valley in New York and Vermont. The charts focus on the plants found in the dry, fertile woods, glades, and cliffs on the hills, from the lake shore to about 1,800 feet elevation. They include characteristic species of the lake shore like leadplant and buffaloberry but not wetland species like alder and winterberry or species of colder forests like hobblebush and mountain ash. Aliens that are widespread on the hills are included and marked with asterisks. Those largely confined to settlements and second growth are omitted. The majority of the species shown here are separable by their twigs. Red dashed lines connect species that may not be. The oaks are hard, the willows, shads, hawthorns, and

gooseberries probably impossible. With all these groups, finding old leaves or fruits and looking at bark, growth habit, and ecology can help a lot. A second set of charts, *Champlain Hills Indicators*, shows the leaves of woody plants and herbs that need fertility or dryness, and hence are useful for recognizing the characteristic Champlain Hills communities. Full woody plant leaf charts and charts of characteristic grasses and sedges will be available next spring. These charts are copyright Northern Forest Atlas Foundation, Lake Placid, NY, 2014, and all rights are reserved. Copies are available for interested individuals, schools, and groups.

Jerry Jenkins, 2014
A product of the Northern Forest Atlas Project and the Wildlife Conservation Society Adirondack Program



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CHAMPLAIN HILLS BUDS 2:
CHESTNUT TO CHERRIES

● = A COMMON SPECIES ● = A DRY-RICH INDICATOR

FAGACEAE, BEECH FAMILY

Oaks, *Quercus*

sharp tapering buds

shorter and rounder

Chestnut *Castanea dentata*

Beech *Fagus grandifolia*

Red oak *Quercus rubra*

Scarlet oak *Quercus coccinea*

Black oak *Quercus velutina*

Chestnut oak *Quercus montana*

Bur oak *Quercus macrocarpa*

Yellow oak *Quercus muehlenbergia*

Swamp white oak *Quercus bicolor*

White oak *Quercus alba*

Prickly and Appalachian gooseberries *Ribes cynosbati* & *rotundifolium*

GROSSULARIACEAE,
GOOSEBERRY FAMILY

HAMAMELIDACEAE,
WITCH-HAZEL FAMILY

JUGLANDACEAE, WALNUT FAMILY

MALVACEAE,
MALLOW FAMILY

MORACEAE,
MULBERRY FAMILY

MYRICACEAE, BAYBERRY FAMILY

OLEACEAE, OLIVE FAMILY

RANUNCULACEAE,
BUTTERCUP FAMILY

Witch hazel *Hamamelis virginiana*

Bitternut hickory *Carya cordiformis*

Shagbark hickory *Carya ovata*

Butternut *Juglans cinerea*

Basswood *Tilia americana*

Hackberry *Celtis laevigata*

Sweetfern *Comptonia peregrina*

Bayberry *Myrica pensylvanica*

White ash *Fraxinus americana*

Red ash *Fraxinus pennsylvanica*

Purple clematis *Clematis occidentalis*

RHAMACEAE, BUCKTHORN FAMILY

ROSACEAE, ROSE FAMILY

Shadbushes, *Amelanchier*

Cherries & Plums, *Prunus*

Common buckthorn* *Rhamnus cathartica*

New Jersey tea *Ceanothus americana*

Large shadbushes, *Amelanchier arborea* & *laevis*

Shrubby shadbushes, *Amelanchier spicata* group

Hawthorn *Crataegus species*

Shrubby cinquefoil *Dasiphora fruticosa*

Apple* *Malus pumila*

Black cherry *Prunus serotina*

Choke cherry *Prunus virginiana*

Pin cherry *Prunus pensylvanica*

Notes: dwarf chestnut oak (a shrub with leaves and buds like yellow oak) and pignut hickory (smooth bark, smaller buds than shagbark) are reported from the county but haven't been seen. Swamp white oak and red ash are mostly near water, but could be on the hills. Bayberry and chestnut are possible but not currently known. The shads all look alike. *Ribes rotundifolium*, with smooth fruits and wedge-shaped rather than rounded bases to the leaves, seems to be the common gooseberry in rocky places.

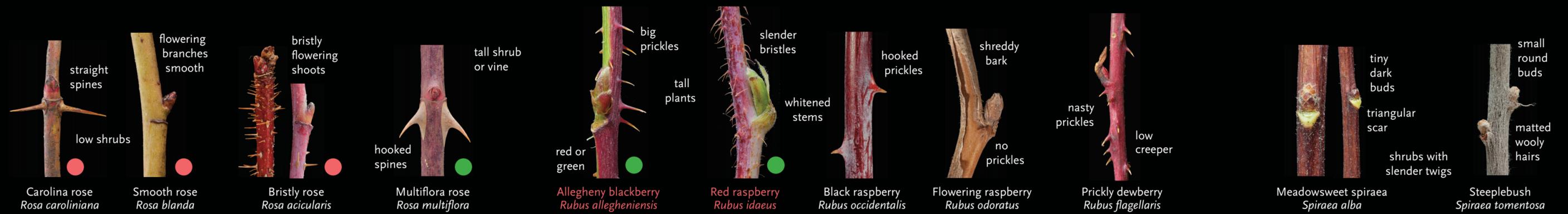
CHAMPLAIN HILLS BUDS 3:
ROSES TO GRAPES

● = A COMMON SPECIES ● = A DRY-RICH INDICATOR

ROSACEAE, ROSE FAMILY

Roses, *Rosa*

Blackberries, Raspberries, Dewberries: *Rubus*



RUTACEAE,
RUE FAMILY

SALICACEAE, WILLOW FAMILY

SAPINDACEAE, MAPLE FAMILY



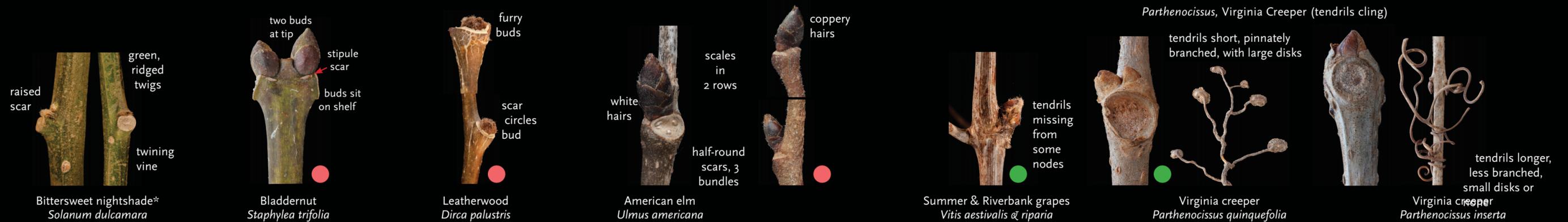
SOLANACEAE,
POTATO FAMILY

STAPHYLEACEAE,
BLADERNUT FAMILY

THYMLIACEAE,
MEZEREUM FAMILY

ULMACEAE, ELM FAMILY

VITACEAE, GRAPE FAMILY



Notes: Smooth rose is close to Carolina rose. When well-marked it has smooth fruiting branches, erect-sepals, and fruits without glands. The lower branches can have scattered bristles but, in theory, never develop the strong nodal bristles of *R. carolina*. The willows, none of which occur regularly on the Champlain Hills, vary in twig color, bud shape, and hairiness. The best way to separate them winter is to look for old leaves. The two Virginia creepers are

almost identical except for the tendrils, and these vary. To make things worse, there are a lot of forest-floor plants without any tendrils at all. For practical reasons, many of us only recognize a single species.

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