**Winter Tree Identification Clue Sheet**

**Red Oak (Quercus rubra)**

- **Leaves**: alternate, simple, lobed, not deeply lobed, lobes are pointed at tip, 13-23 cm long, 3-6 cm wide
- **Buds**: Red, hairy buds
- **Fruit**: Acorn 2-3 cm long; no fringe on cap
- **Bark**: ridges interspersed with rough vertical areas give it a "zebra stripe" or "ski slope" look on older trees; young trees have smooth, grayish brown bark
- **Habitat**: prefers moist, loamy, sandy, rocky, and clay soil conditions
- **Leaf scar**: numerous scattered bundle scars

**Pin Oak (Quercus palustris)**

- **Leaves**: alternate, 5-7 lobes, deep sinuses
- **Buds**: light brown, conical
- **Leaf scar**: numerous scattered bundle scars
- **Fruit**: Tiny acorns – less than 1.5 cm in diameter
- **Bark**: thin, grayish brown, shallow ridges
- **Habitat**: swampy, low lands of forested areas

**White Oak (Quercus shumardii)**

- **Leaves**: alternate; 10 - 23 cm long; elliptical; 5 to 9 rounded lobes; widest beyond middle and tapering to base
- **Bark**: light gray; shallowly fissured into long broad scaly plates or ridges, often loose
- **Fruit**: Acorns: 1 - 3 cm long; egg-shaped; about 1/4 enclosed by shallow, warty cup
- **Buds**: deep brown, medium-sized (~ 5 mm)
- **Habitat**: White oak grows on a wide range of soils and sites. Growth is good on all but the driest, shallowest soils
- **Leaf scar**: numerous scattered bundle scars
Red Maple (*Acer rubrum*)

- **Leaves:** simple, opposite; 7-12 cm long and wide; 3lobed (occasionally weakly 5-lobed); sharply V-shaped sinuses; small sharp teeth along margins
- **Bark:** Young trees up to 4-8 inches with a smooth light gray bark, developing into gray or black ridges and ultimately narrow scaly plates.
- **Buds:** Slender, shiny, usually reddish in color; terminal buds \(\frac{1}{8}-\frac{1}{4}\) inch long, blunt, red
- **Fruit:** V-shaped, double-winged fruit about \(\frac{1}{2}-1\) inch long; fruits in spring
- **Leaf scar** has 3 bundle scars
- **Habitat:** found in virtually all habitats from swamps to dry uplands and outwash plains

Silver Maple (*Acer Saccharinum*)

- **Leaves:** simple, opposite; 5 lobes; serrated
- **Bark:** furrowed, with loose thin scaly plates
- **Buds:** blunt, dark red, shiny
- **Fruit:** V-shaped, double-winged fruit; wings at 90 degree angle
- **Leaf scar** has 3 bundle scars
- **Habitat:** stream banks, floodplains, lake edges

Sugar Maple (*Acer saccharum*)

- **Leaves:** simple, opposite; 5 lobes; entire between points on lobes, 7-13 cm long and wide
- **Bark:** gray, furrowed bark; twigs opposite and reddish brown becoming gray
- **Buds:** terminal bud reddish brown and sharply pointed
- **Fruit:** V-shaped, double-winged fruit; drops in fall
- **Leaf scar** has 3 bundle scars
- **Habitat:** mesic deciduous forests, well to moderately well drained, northern hardwoods, very shade tolerant
Shellbark Hickory (*Carya laciniosa*)

- **Leaves:** alternate, compound leaves with 7 leaflets; petioles retained on twigs into winter
- **Bark:** narrow, peeling, dark gray strips
- **Buds:** large
- **Fruit:** Nut enclosed in thick woody husk; 3-5 cm
- **Twigs:** buff or orange
- **Habitat:** wet, fertile bottomland.
- tan, 5-sided pith

Yellow Birch (*Betula Alleghaniensis*)

- **Leaves:** simple, alternate, 7-12 cm long, half as wide; sharply, doubly serrated
- **Bark:** Yellowish-gray, exfoliating (peeling) when older; thin, smooth and dark on young stems; lenticels
- **Buds:** small, brown
- **Fruit/Flower:** catkin (cone-like); longer than wide
- **Twigs and buds** have a wintergreen odor and taste
- **Habitat:** northern hardwoods and poorly drained swamps

White Birch (*Betula papyrifera*)

- **Leaves:** simple, alternate, 5-8 cm long, 3-5 cm wide; sharply, doubly serrated except for rounded, entire base
- **Bark:** Mature bark is white and peeling; young bark is smooth and dark, reddish brown with lenticels
- **Buds:** small, no wintergreen odor
- **Fruit/Flower:** catkin (cone-like); 4.5-4.5 cm long
- **Habitat:** disturbed areas; well-drained forests, dunes, wetland and swamp margins
White Ash (Fraxinus americana)

- **Leaves**: leaves opposite and pinnately compound, 7-9 leaflets, 7-13 cm long; leaflets with short stalks, entire or obscurely serrate
- **Bark**: thick, gray, deeply furrowed into narrow regular interlacing diamond-shaped pattern; twigs opposite and stout, appearing “knobby”
- **Leaf scars**: with a concave upper margin, sometimes deeply notched
- **Buds**: blunt, rusty or reddish brown buds
- **Fruit**: a single samara (winged fruit) in the fall
- **Habitat**: typically dry and dry mesic upland sites, doesn’t tolerate wet sites
- **Leaf scar**: shield shaped

Black Ash (Fraxinus nigra)

- **Leaves**: opposite and pinnately compound, 7-11 leaflets, 7-13 cm long; leaflets sessile, entire or obscurely serrate
- **Bark**: thick, soft, ash gray and scaly
- **Buds**: ovoid, pointed, bluish black –like chocolate chips
- **Fruit**: single samara (winged fruit) in the fall
- **Habitat**: poorly drained swamps and wet depressions
- **Leaf scar**: shield shaped

Quaking Aspen (Populus tremuloides)

- **Leaves**: alternate, simple, flattened petioles, 4-6 cm long and wide; finely serrated
- **Bark**: smooth, creamy white to yellowish green
- **Buds**: slender, angled, reddish brown, resinous
- **Fruit/Flower**: Narrow, light green capsules as fruits
- **Habitat**: wet to dry; disturbed areas