Swamps

Swamps are a common, diverse group of wetlands occurring in a variety of landscapes. Soils are predominantly mineral based although the presence of peat can occur in some settings. They are often transition areas between upland forest and other wetland areas and typically have hummocky ground that may contain pools of water. Most commonly recognized as shoreline areas of streams, lakes and floodplains, swamps are either treed or shrubby.

**Types of Swamps**

- **Treed swamp:**
  - dense (>75% canopy closure) tall trees (>10 m)
  - may be conifer dominated, hardwood dominated or mixed wood

- **Shrub swamp:** dominated by tall shrubs (>2 m) such as willow and alder

**Ecological Benefits**

- Moderate floods by slowing water flow
- Fertile soils support a diversity of trees, shrubs and other plants
- Vegetation protects shoreline areas from erosion and sedimentation
- The variety of swamp wetlands provide a high diversity of habitat for many species of wildlife
**Identifying Characteristics**

**Vegetation**
- **Treed swamp species:** black spruce and tamarack (conifer swamps), white birch, balsam poplar (hardwood swamps) or combinations of conifer and hardwood species (mixed wood swamps)
- **Shrub swamp species:** willow, redosier dogwood and speckled alder with sedges and grasses

**Soil**
- **Nutrient levels:** range from poor to rich, with conifer swamps being poor to medium and other swamps ranging from medium to rich
- **Typically, less than 40 cm of peat; primarily composed of decaying shrubs and trees (unlike sphagnum-dominated peat in bogs and fens)**
- **Most soil is aerated, but water availability is still high in lower portions of the root zone**
- **Typically gleysols with mottling (signs of temporary flooding) in the upper horizons and gleying (signs of permanent saturation) in the lower horizons**

**Hydrology**
- **Water source:** run-off, precipitation, groundwater and flooding from adjacent wetlands
- **Seasonally flooded, fluctuating water levels**
- **Hummocky terrain with pools of water**

**Resources**
- Ducks Unlimited Canada Natural Values Fact Sheet Series (ducks.ca/naturalvalues)
- Field Guide to the Wetlands of the Boreal Plains Ecozone of Canada (ducks.ca/boreal-field-guide)
- Ducks Unlimited Canada Western Boreal Program (borealforest.ca)