



F I E L D G U I D E

Identification of common riparian plants of Saskatchewan



Acknowledgements

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Some illustrations for this guide were supplied by Agriculture and Agri-Food Canada. Other illustrations were drawn by Rhondi Taylor-Davis. Funding for illustrations was provided by Saskatchewan Wetland Conservation Corporation (SWCC).

Thanks are due to Tom Harrison (SWCC) for assisting with development of this publication. Thanks are also due to the Fraser Herbarium at the University of Saskatchewan for providing mounts of plants for the illustrations and to Jim Romo for his botanical suggestions.



Introduction

This guide includes some of the plants that are commonly found in riparian areas of Saskatchewan. Vegetative and flowering characteristics are used to identify each species and are indicated directly on illustrations. Common and scientific names are also provided.

This guide is organized into four sections, each consisting of a common range plant group.

1. Trees and Shrubs
2. Grasses
3. Grass-like plants
4. Forbs

The following steps will facilitate the identification process:

1. Find the plant group in which the unknown specimen belongs using the key on page two.
2. Examine the different species in the selected section.
3. Eliminate those species that have obvious differences from the unknown specimen to narrow the possibility to a few different species.
4. Use vegetative and floral characteristics to eliminate the remaining possibilities and positively identify the unknown species.

Trees and Shrubs

Hoary willow	<i>Salix candida</i>	4
Sandbar willow	<i>Salix interior</i>	4
Yellow willow	<i>Salix lutea</i>	4
Beaked willow	<i>Salix bebbiana</i>	4
Peach-leaved willow	<i>Salix amygdaloides</i>	5
Pussy willow	<i>Salix discolor</i>	5
Saskatoon	<i>Amelanchier ainifolia</i>	5
Red-Osier Dogwood	<i>Cornus stolonifera</i>	5
Thorny buffaloberry	<i>Shepherdia argentea</i>	6
Canada buffaloberry	<i>Shepherdia Canadensis</i>	6
Western snowberry	<i>Symphoricarpos occidentalis</i>	6
Choke cherry	<i>Prunus virginiana</i>	6
Hawthorn	<i>Crataegus rotundifolia</i>	7
Silverberry	<i>Elaeagnus commutata</i>	7
Prickly Rose	<i>Rosa acicularis</i>	7
Wood's rose	<i>Rosa woodsii</i>	7
Manitoba maple	<i>Acer negundo</i>	8
Green ash	<i>Fraxinus pennsylvanica</i>	8
Trembling aspen	<i>Populus tremuloides</i>	8
Cottonwood	<i>Populus deltoids</i>	8
Balsam poplar	<i>Populus balsamifera</i>	9

Grasses

Awned wheatgrass	<i>Agropyron subsecundum</i>	11
Slough grass	<i>Beckmannia syzigachne</i>	11
Marsh reed grass	<i>Calamagrostis Canadensis</i>	11
Northern reed grass	<i>Calamagrostis inexpansa</i>	11
Narrow reed grass	<i>Calamagrostis stricta</i>	12
Spangletop	<i>Scolochloa festucacea</i>	12
Alkali cord grass	<i>Spartina gracilis</i>	12
Salt grass	<i>Distichlis stricta</i>	12
Nuttall's salt-meadow grass	<i>Puccinellia nuttaalliana</i>	13
Reed canary grass	<i>Phalaris arundinacea</i>	13
Tall manna grass	<i>Glyceria grandis</i>	13
Fowl manna grass	<i>Glyceria striata</i>	13
Tufted hair grass	<i>Deschampsia caespitosa</i>	14

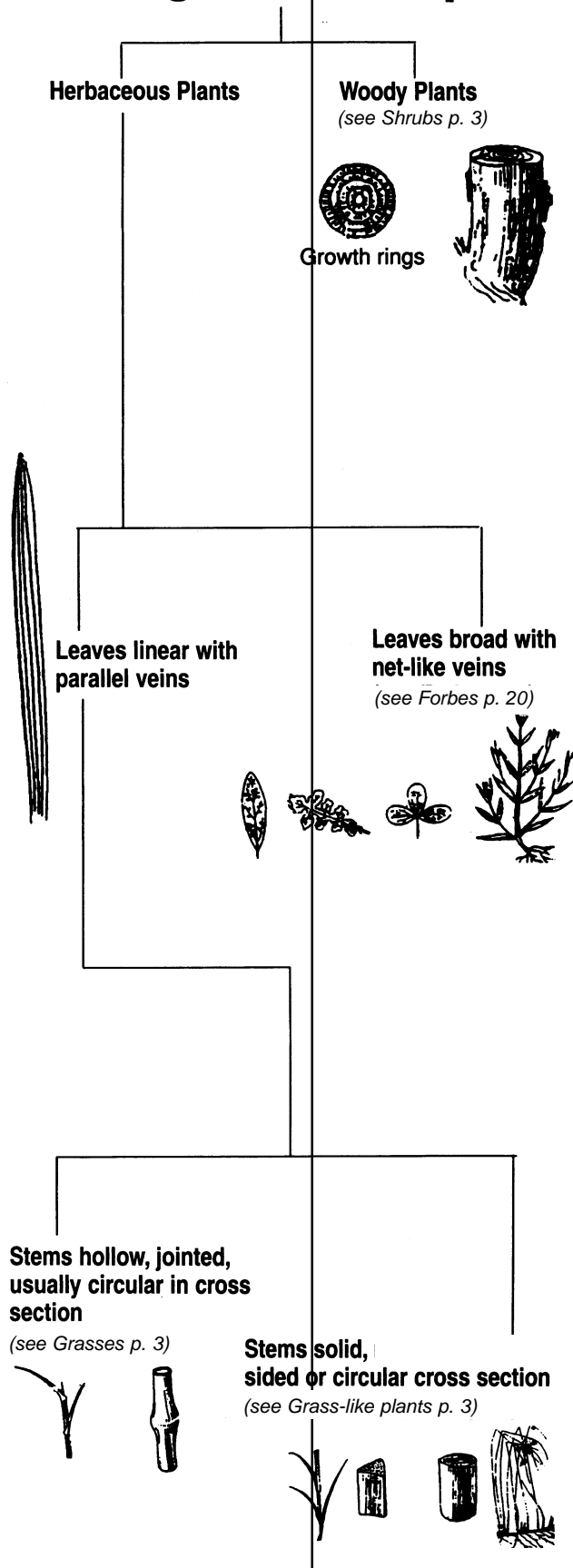
Grass-like plants

Awned sedge	<i>Carex atherodes</i>	16
Water sedge	<i>Carex aquatilis</i>	16
Woolly sedge	<i>Carex lanuginosa</i>	16
Beaked sedge	<i>Carex rostrata</i>	16
Great bulrush	<i>Scirpus validus</i>	17
Three-square bulrush	<i>Scirpus americanus</i>	17
Viscid great bulrush	<i>Scirpus acutus</i>	17
Prairie bulrush	<i>Scirpus paludosus</i>	17
Creeping spike-rush	<i>Eleocharis palustris</i>	18
Baltic rush	<i>Juncus balticus</i>	18
Seaside arrow grass	<i>Triglochin maritima</i>	18
Common cattail	<i>Typha latifolia</i>	18

Forbs

Water-parsnip	<i>Sium suave</i>	20
Water-hemlock	<i>Cicuta maculate</i>	20
Cow-parsnip	<i>Heracleum lanatum</i>	20
Wild mint	<i>Mentha arvensis</i>	20
Marsh hedge-nettle	<i>Stachys palustris</i>	21
Water smartweed	<i>Polygonum amphibium</i>	21
Silverweed	<i>Potentilla anserina</i>	21
Seaside buttercup	<i>Ranunculus cymbalaria</i>	21
Canada goldenrod	<i>Solidago Canadensis</i>	22
Common plantain	<i>Plantago major</i>	22
Sea-milkwort	<i>Glaux maritima</i>	22
Western dock	<i>Rumex occidentalis</i>	22

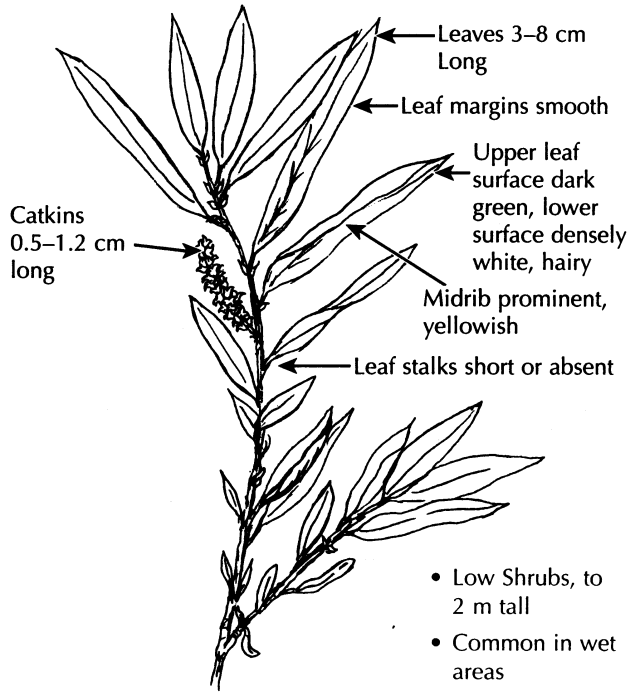
Key to Common Range Plant Groups



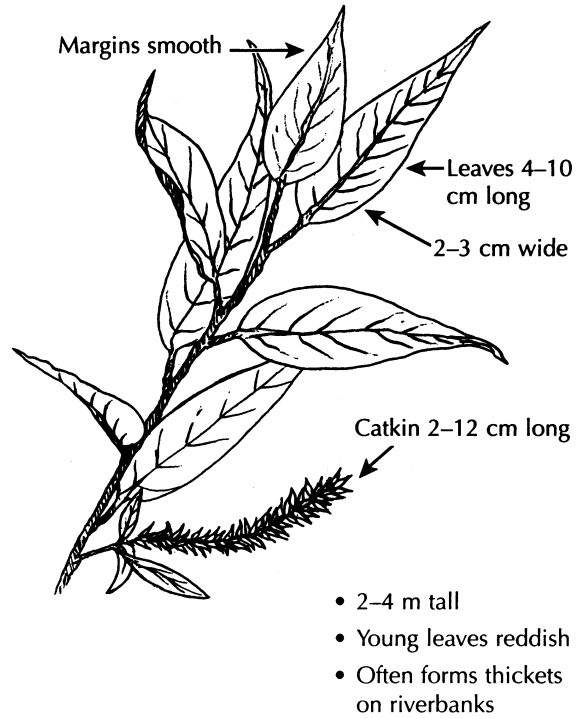
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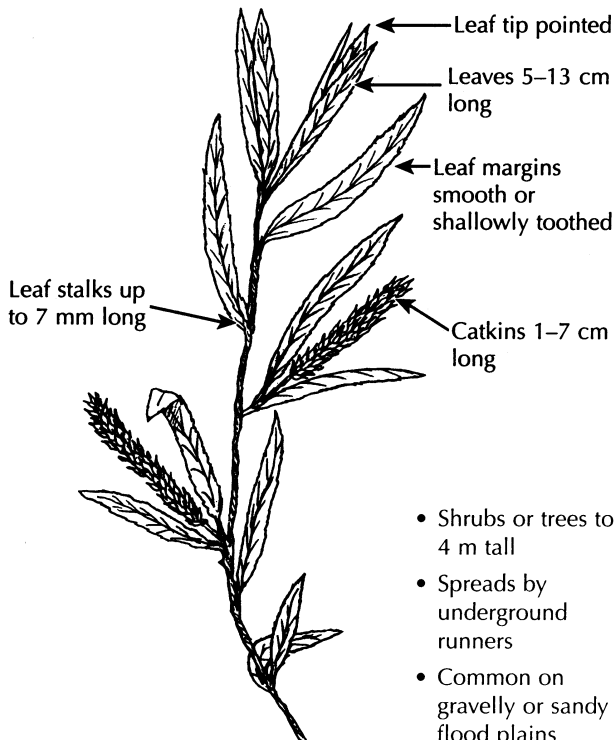
Hoary Willow
Salix candida



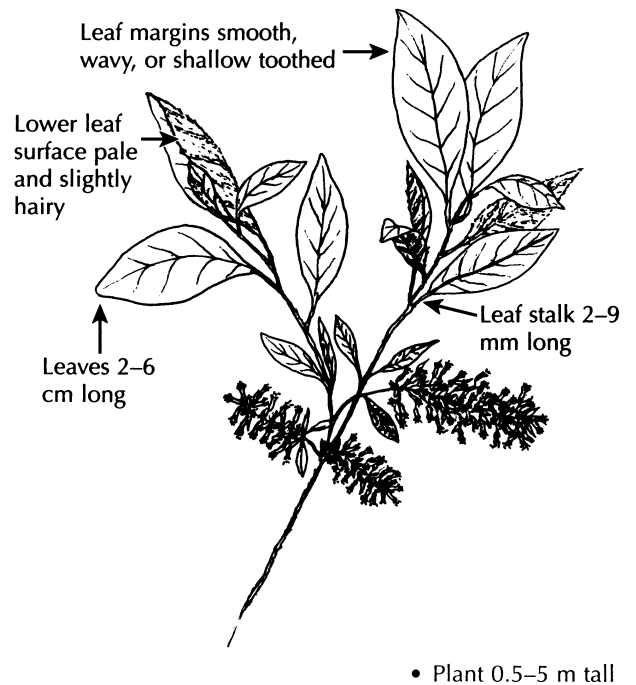
Yellow Willow
Salix lutea



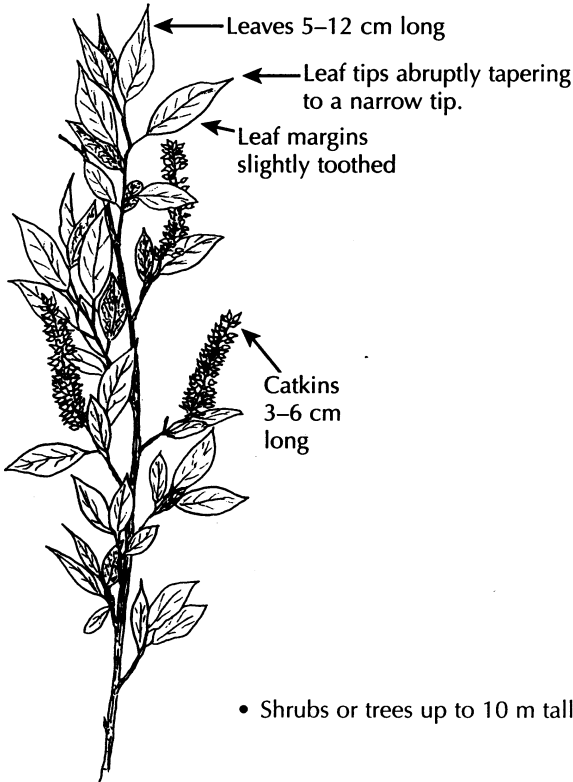
Sandbar Willow
Salix interior



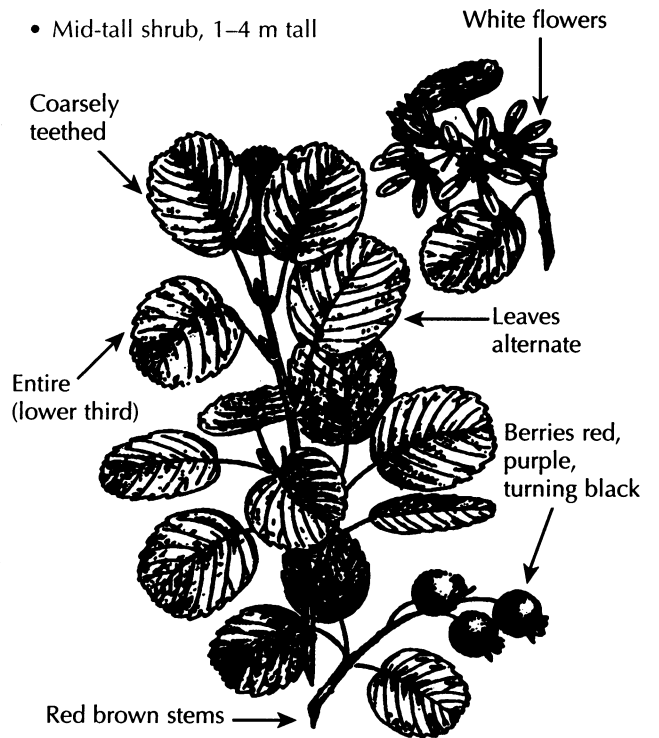
Beaked Willow
Salix bebbiana



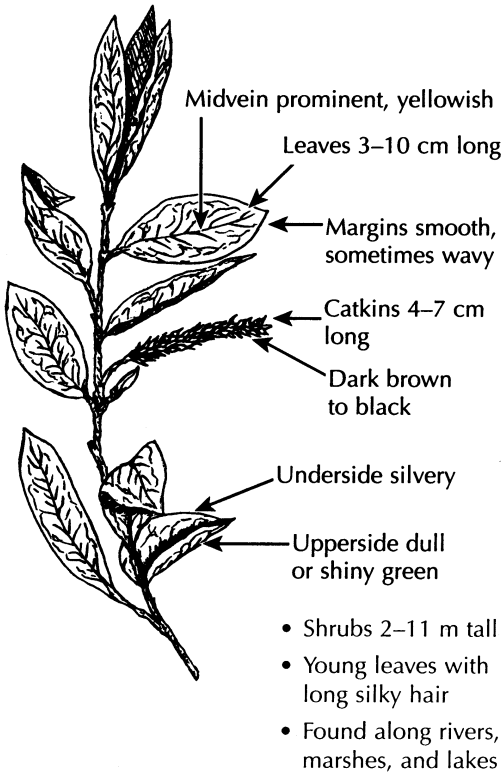
Peach-leaved Willow
Salix amygdaloides



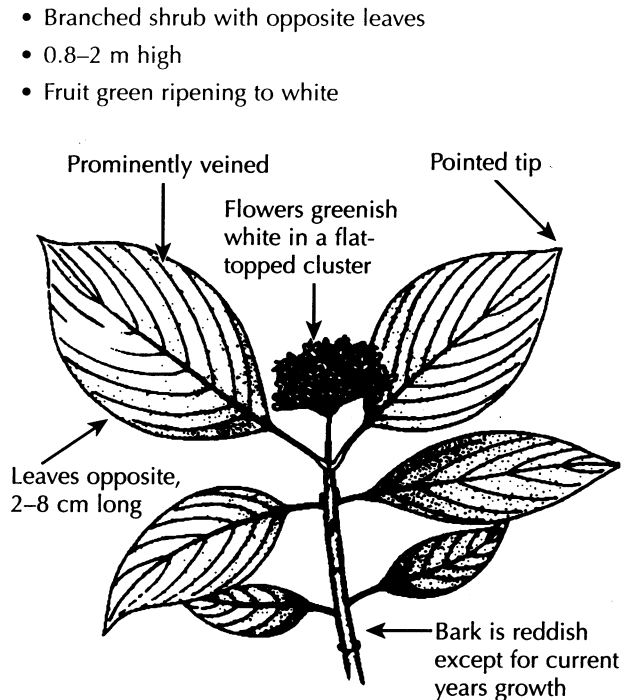
Saskatoon
Amelanchier alnifolia



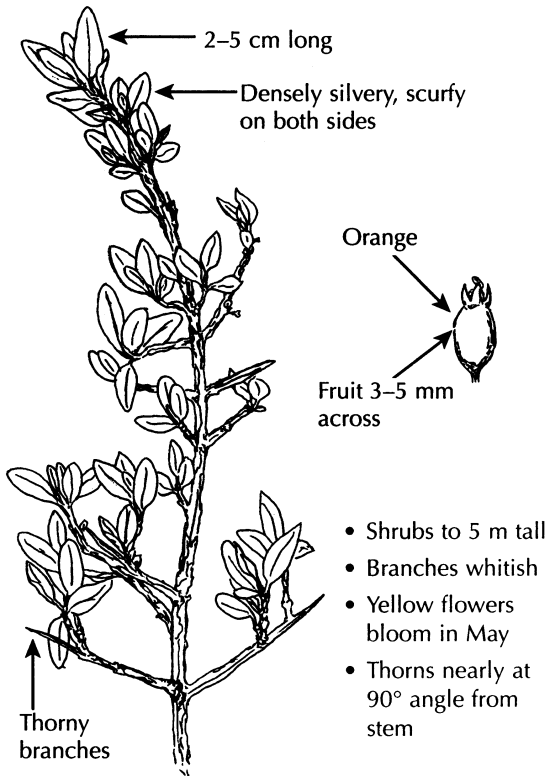
Pussy Willow
Salix discolor



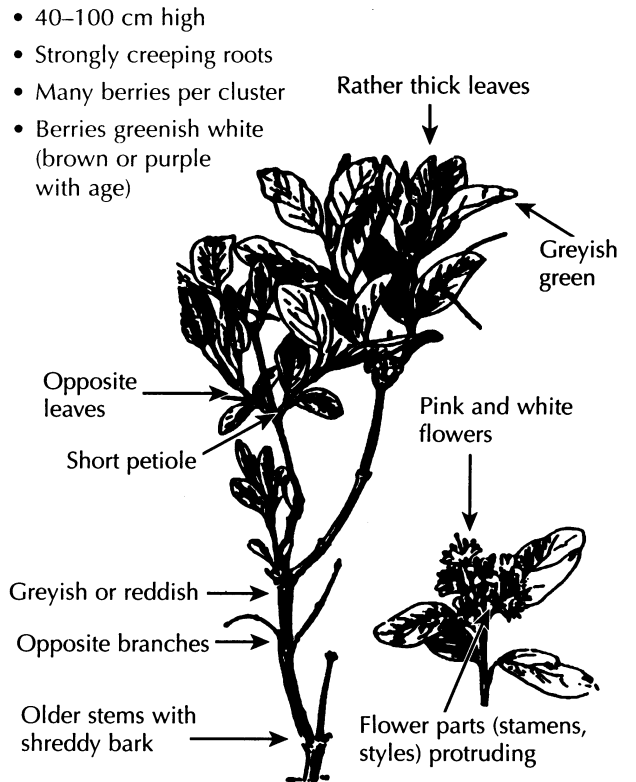
Red-Osier Dogwood
Cornus stolonifera



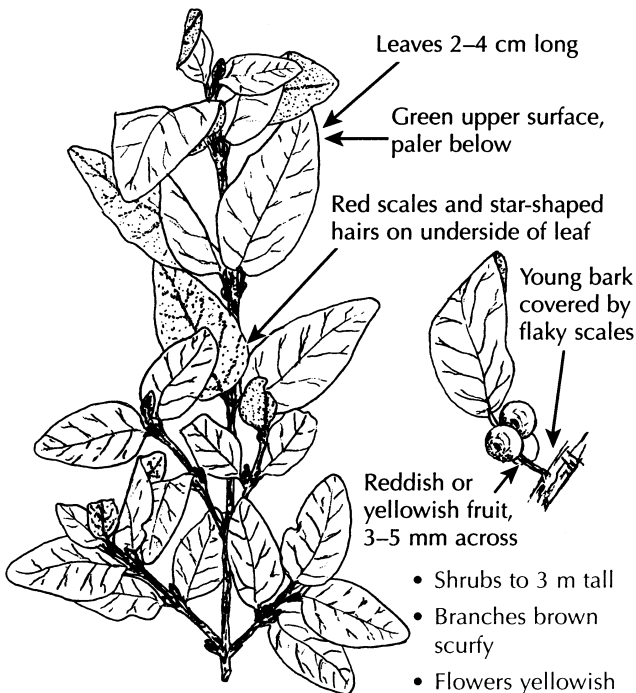
Thorny Buffaloberry
Shepherdia argentea



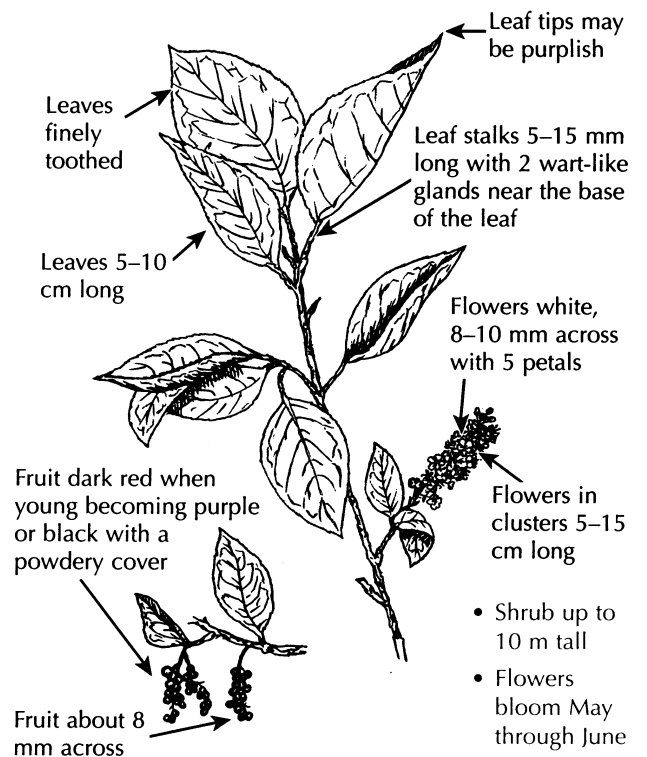
Western Snowberry
Symphoricarpos occidentalis



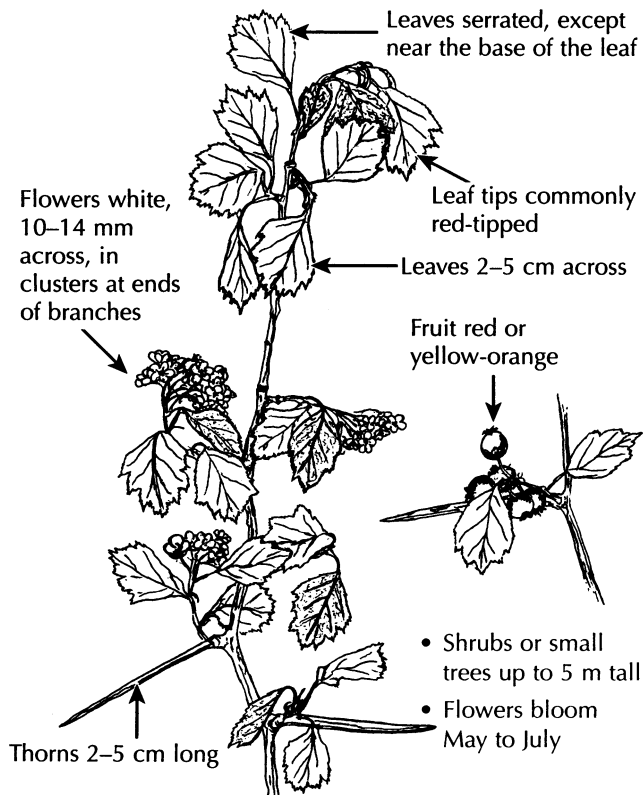
Canada Buffaloberry
Shepherdia canadensis



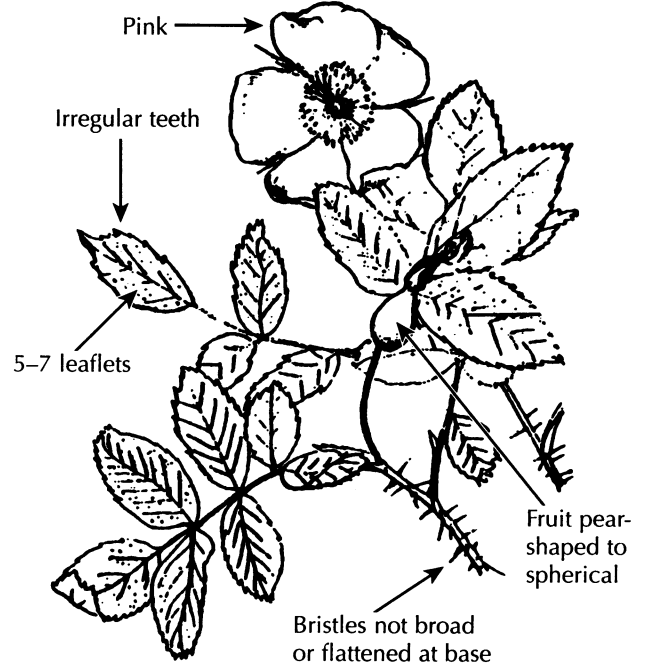
Choke Cherry
Prunus virginiana



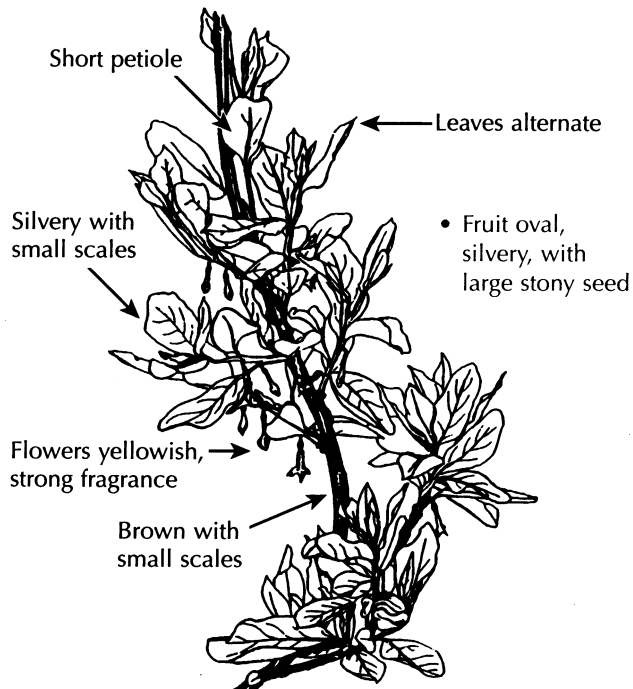
Hawthorn
Crataegus rotundifolia



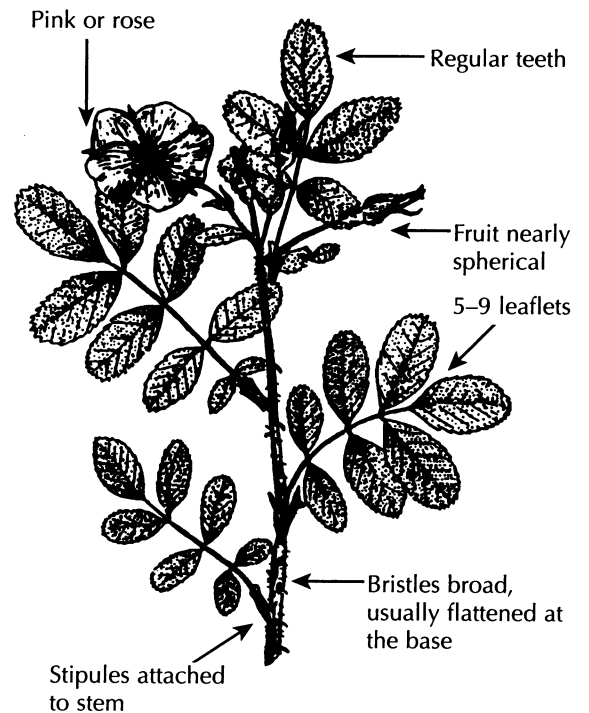
Prickly Rose
Rosa acicularis



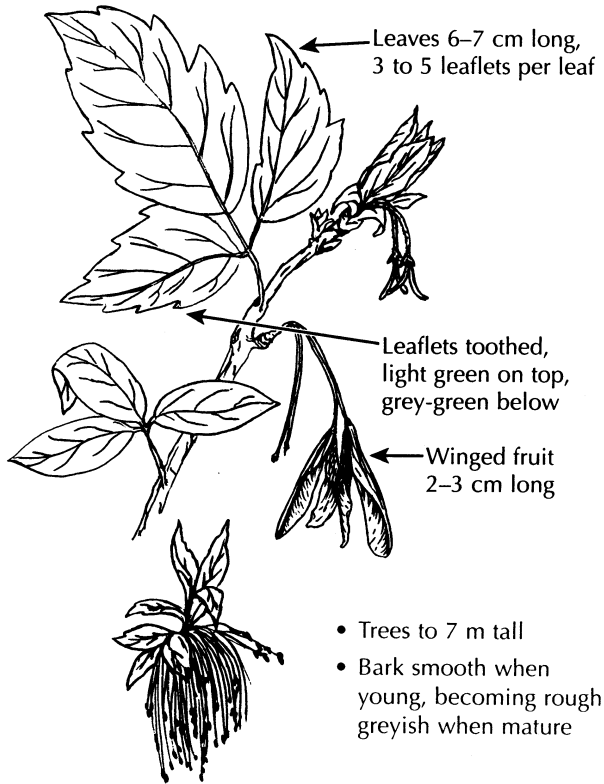
Silverberry
Elaeagnus commutata



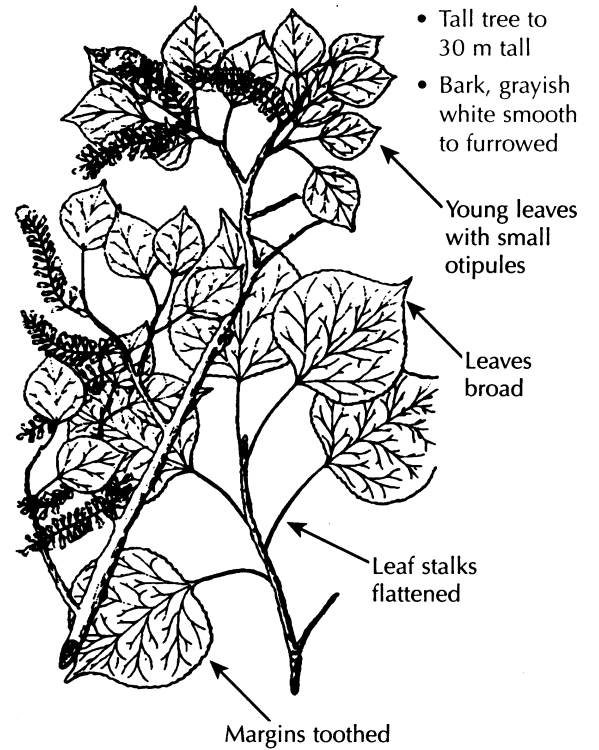
Wood's Rose
Rosa woodsii



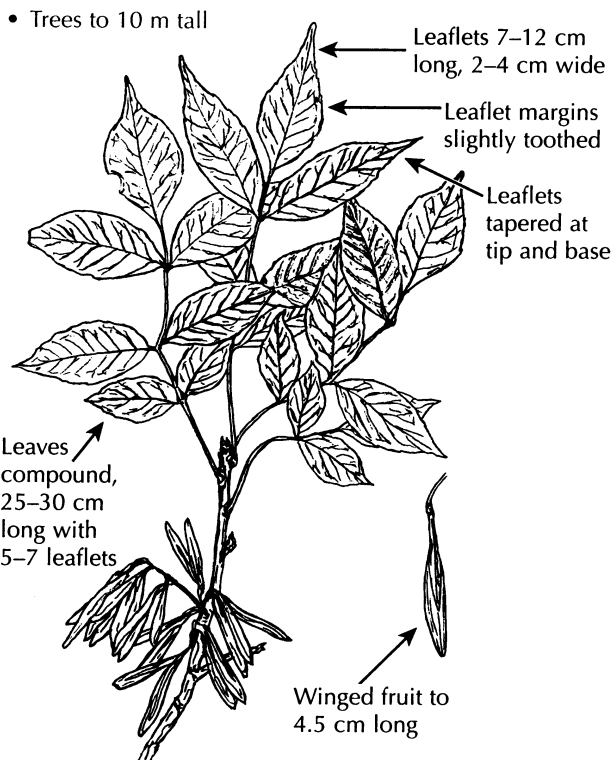
Manitoba Maple
Acer negundo



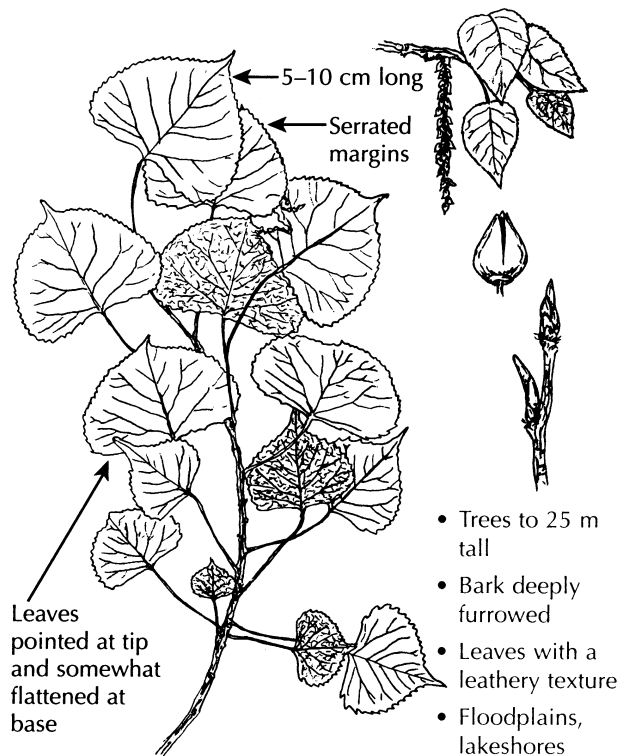
Trembling Aspen
Populus tremuloides



Green Ash
Fraxinus pensylvanica

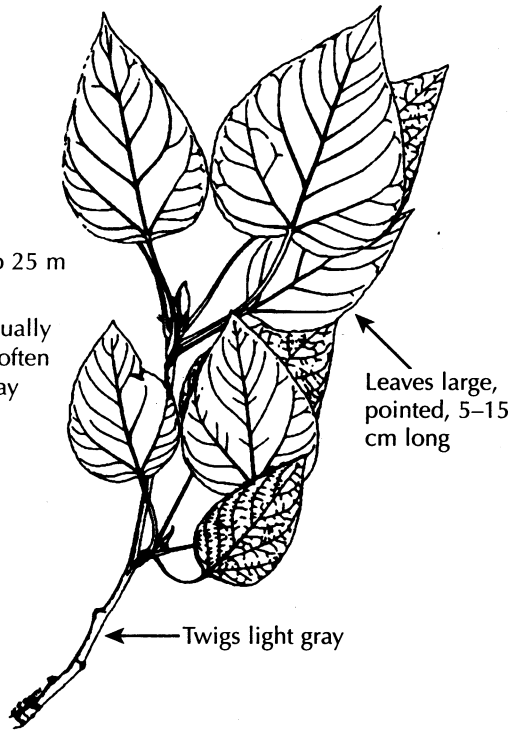


Cottonwood
Populus deltoides



Balsam Poplar ***Populus balsamifera***

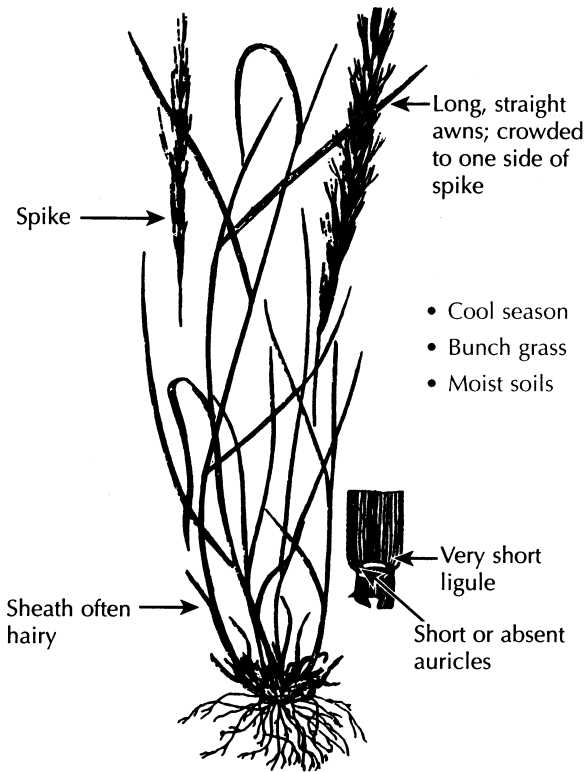
- Trees to 25 m tall
- Bark usually rough, often dark gray



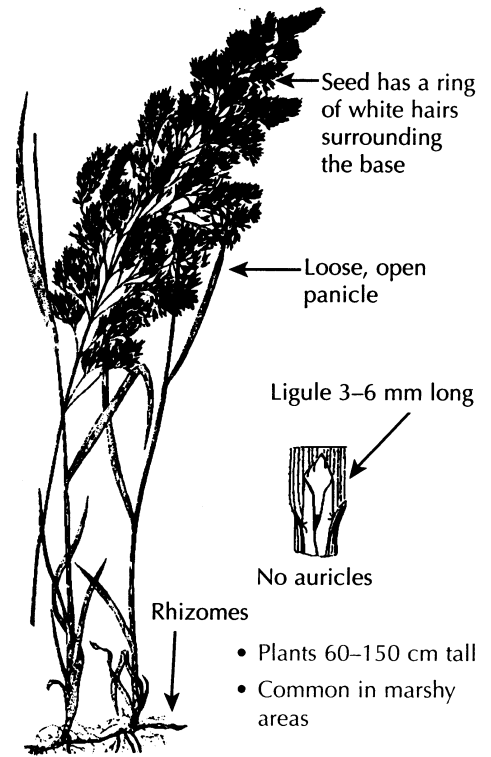
Grasses

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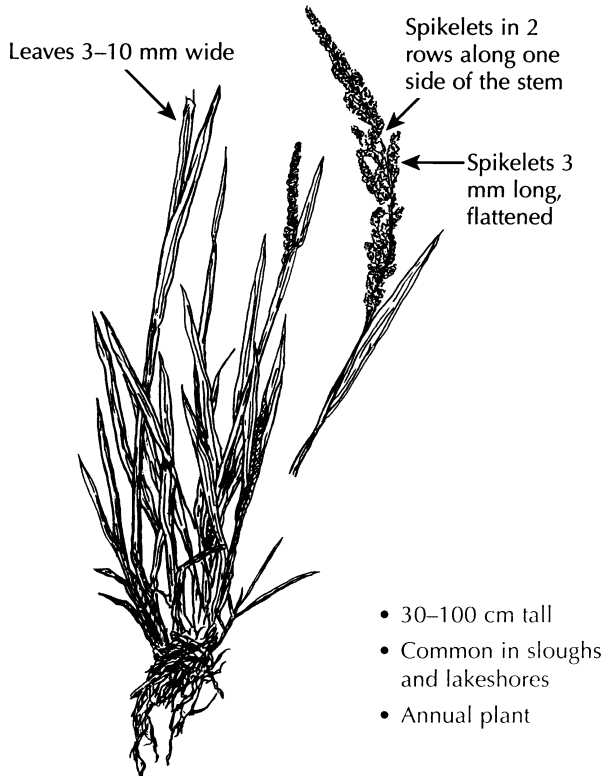
Awned Wheatgrass
Agropyron subsecundum



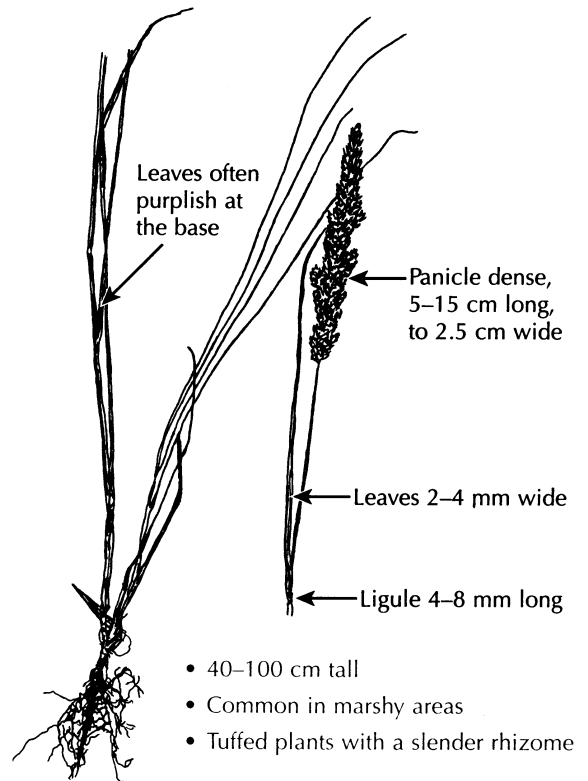
Marsh Reed Grass
Calamagrostis canadensis



Slough grass
Beckmannia syzigachne

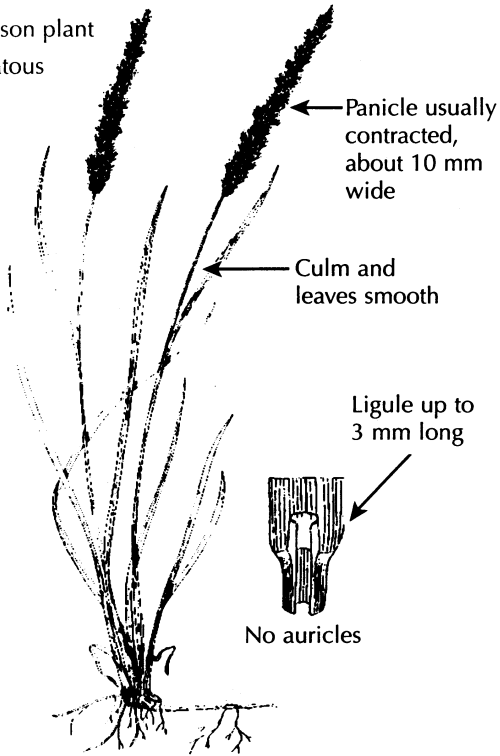


Northern Reed Grass
Calamagrostis inexplansa

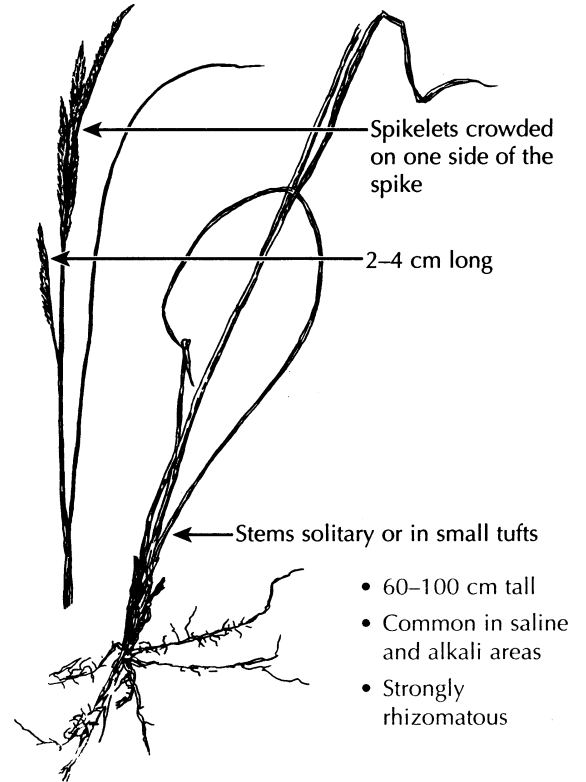


Narrow Reed Grass
Calamagrostis stricta

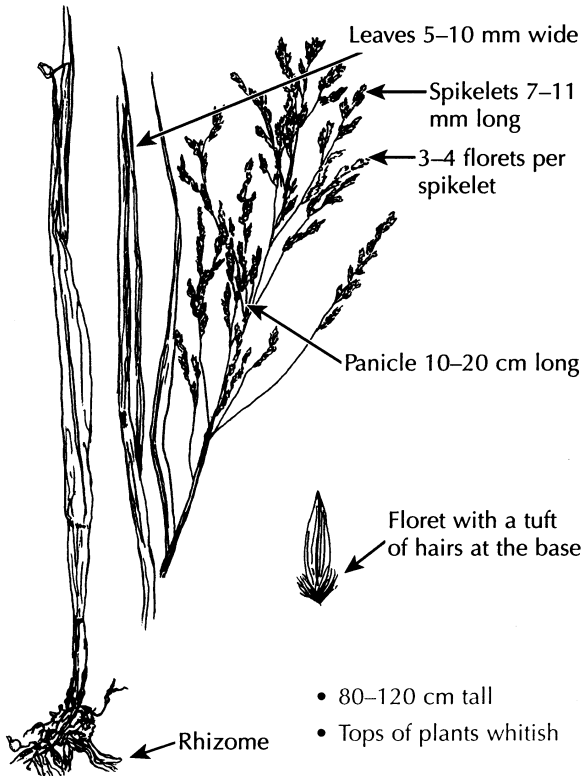
- Cool season plant
- Rhizomatous



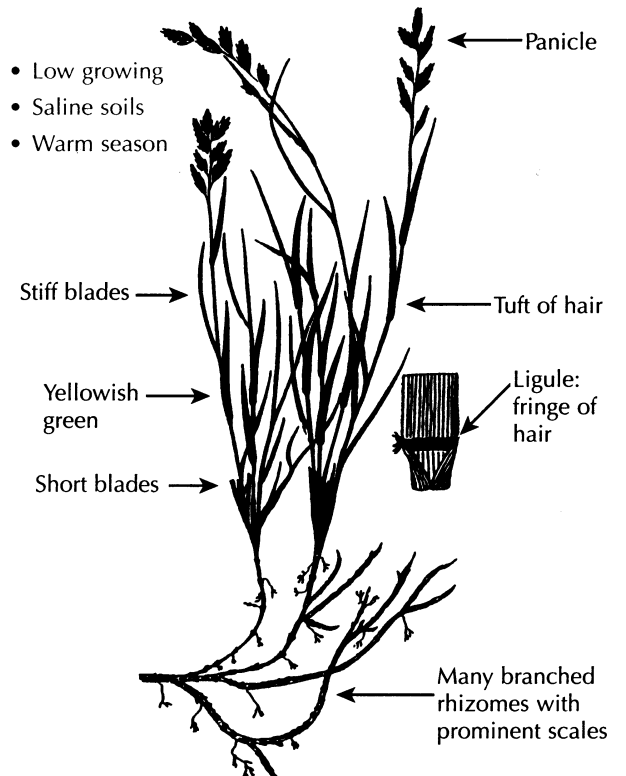
Alkali Cord Grass
Spartina gracilis



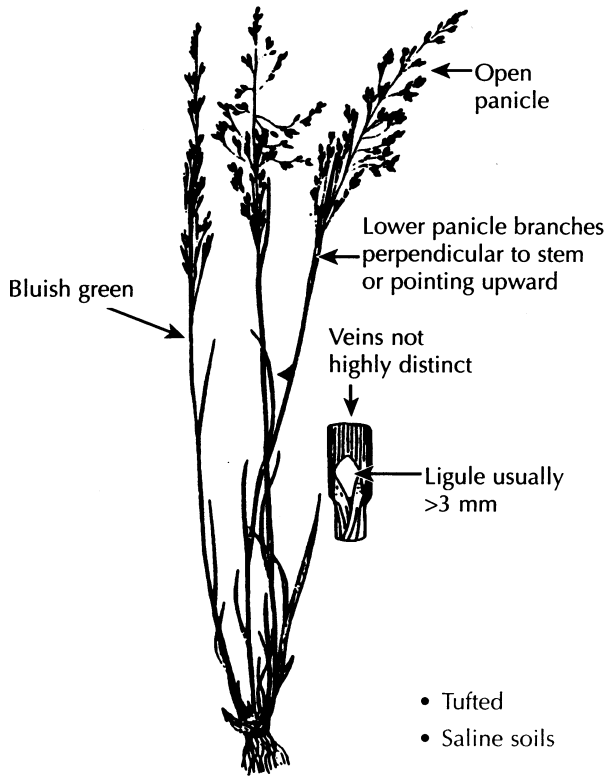
Spangletop
Scolochloa festucacea



Salt Grass
Distichlis stricta

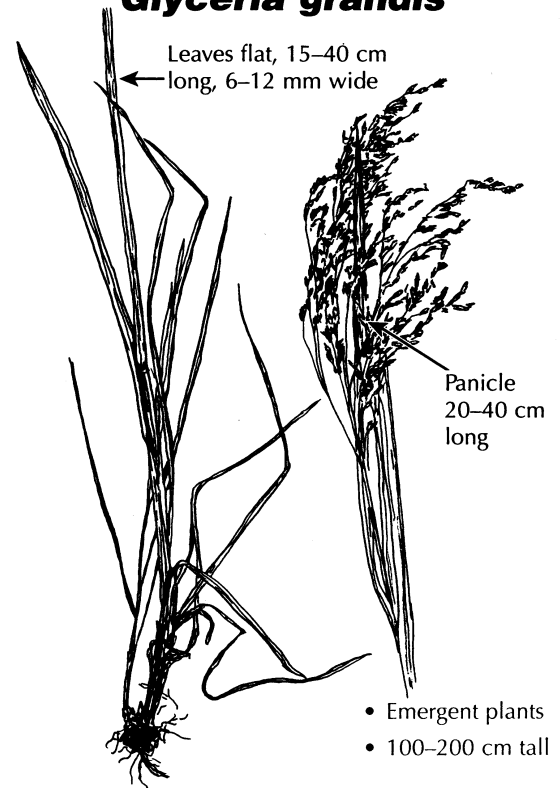


Nuttall's Salt-Meadow Grass
Puccinellia nuttalliana



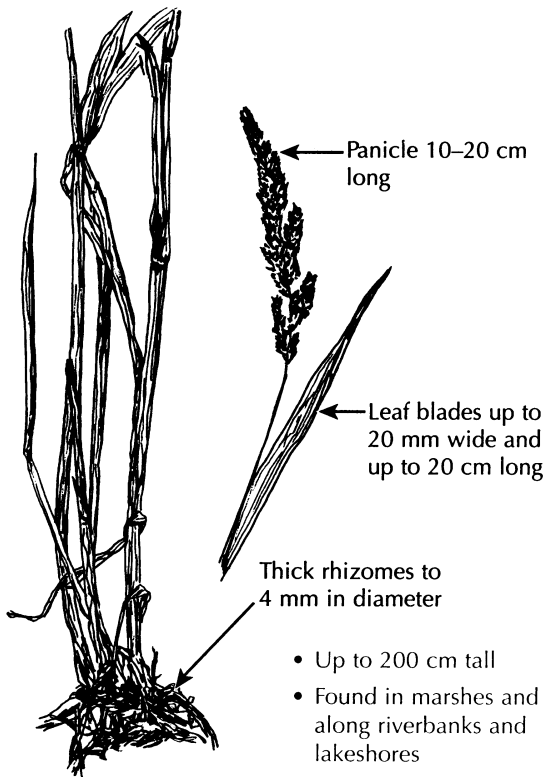
- Tufted
- Saline soils

Tall Manna Grass
Glyceria grandis



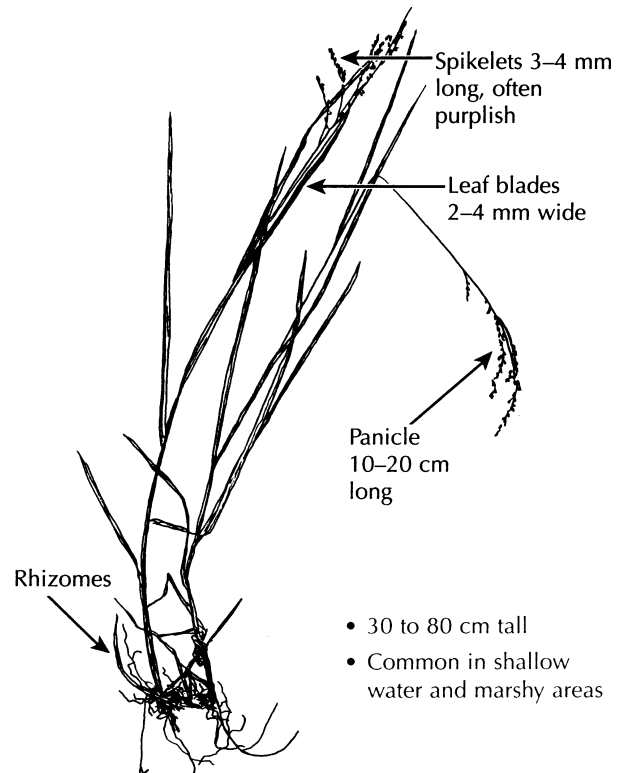
- Emergent plants
- 100-200 cm tall

Reed Canary Grass
Phalaris arundinacea



- Up to 200 cm tall
- Found in marshes and along riverbanks and lakeshores

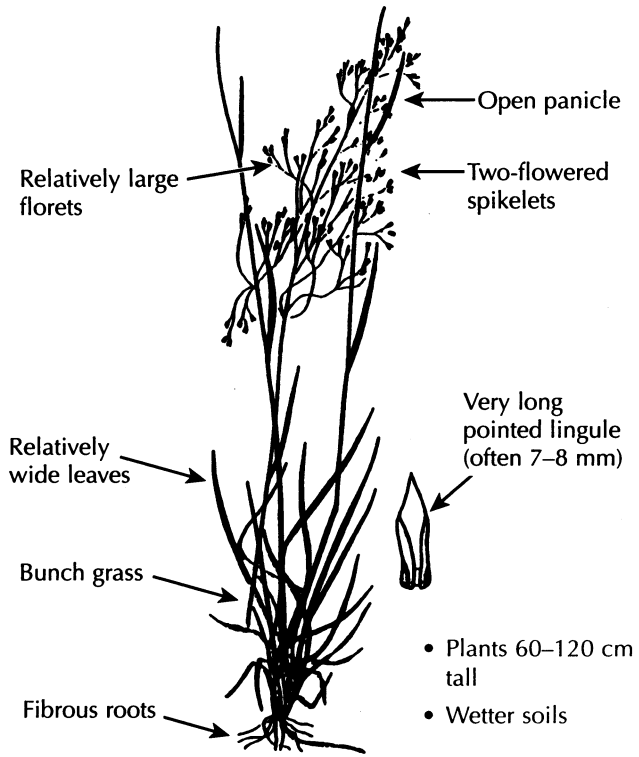
Fowl Manna Grass
Glyceria striata



- 30 to 80 cm tall
- Common in shallow water and marshy areas

Tufted Hair Grass

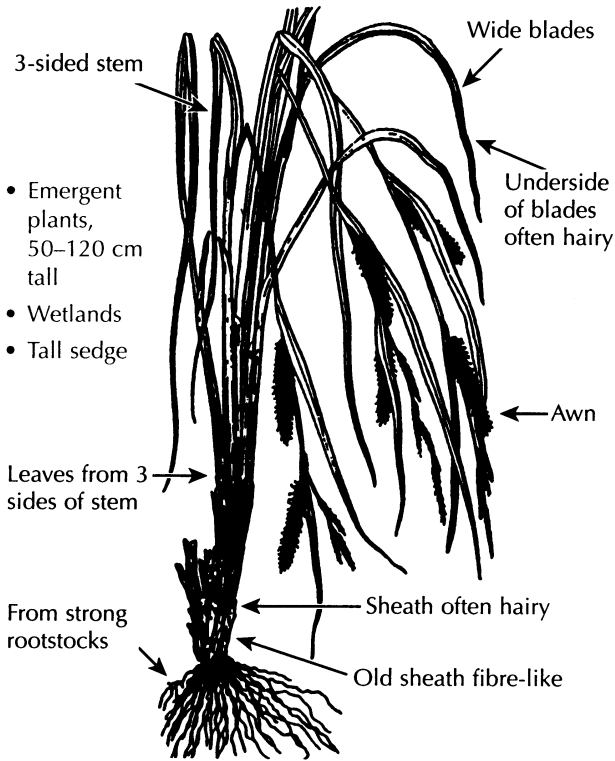
Deschampsia caespitosa



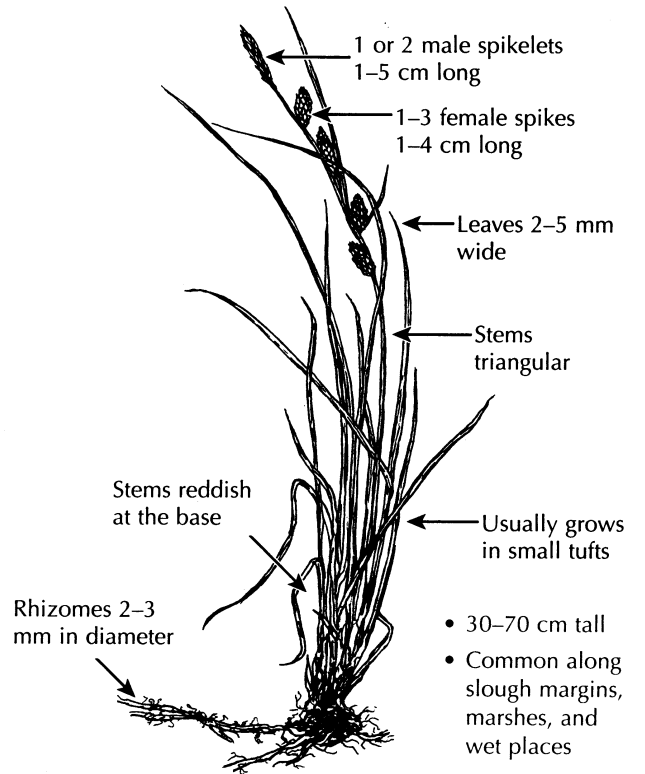
Grass-like plants

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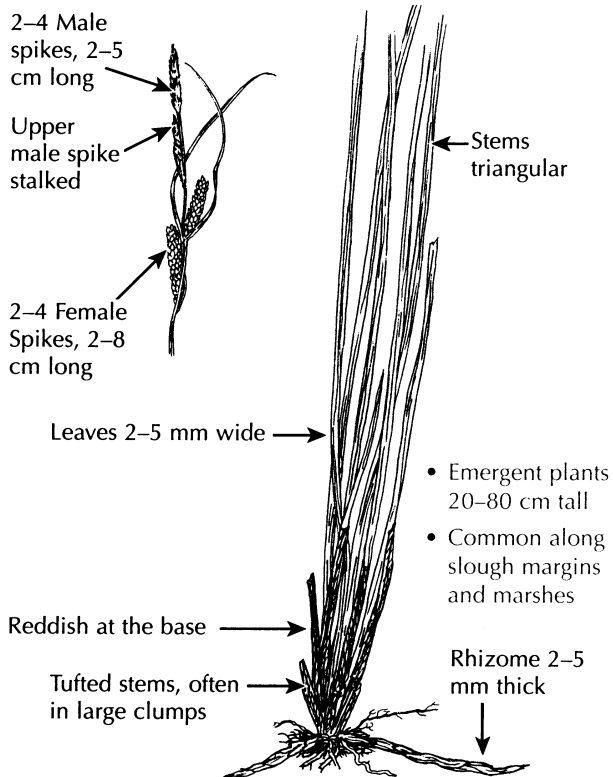
Awne Sedge
Carex atherodes



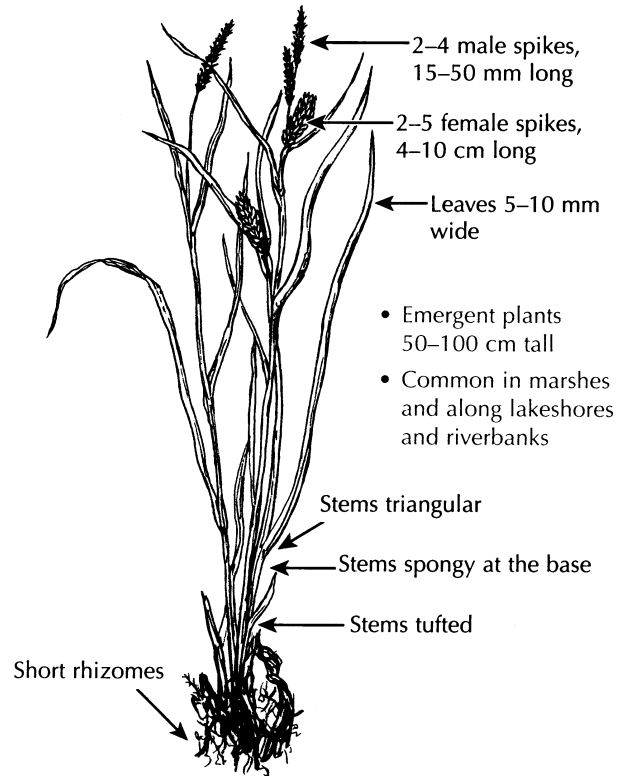
Wooly Sedge
Carex lanuginosa



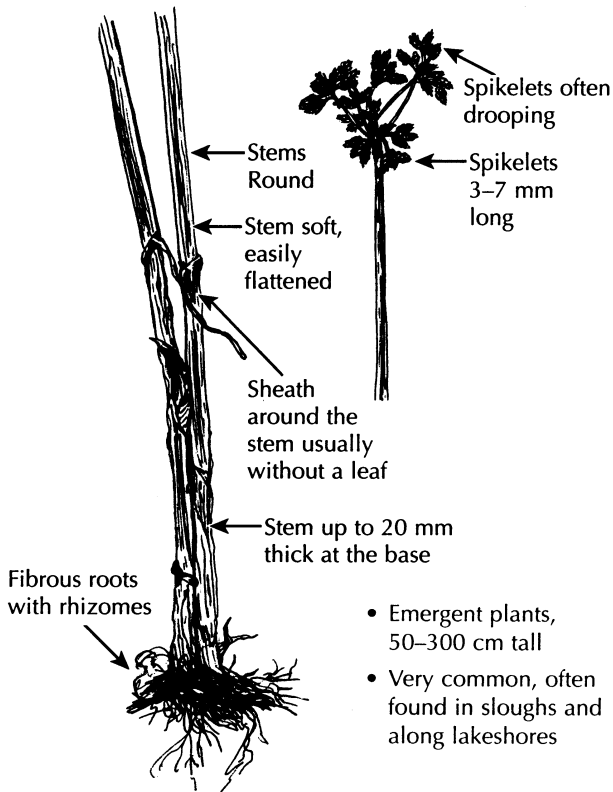
Water Sedge
Carex aquatilis



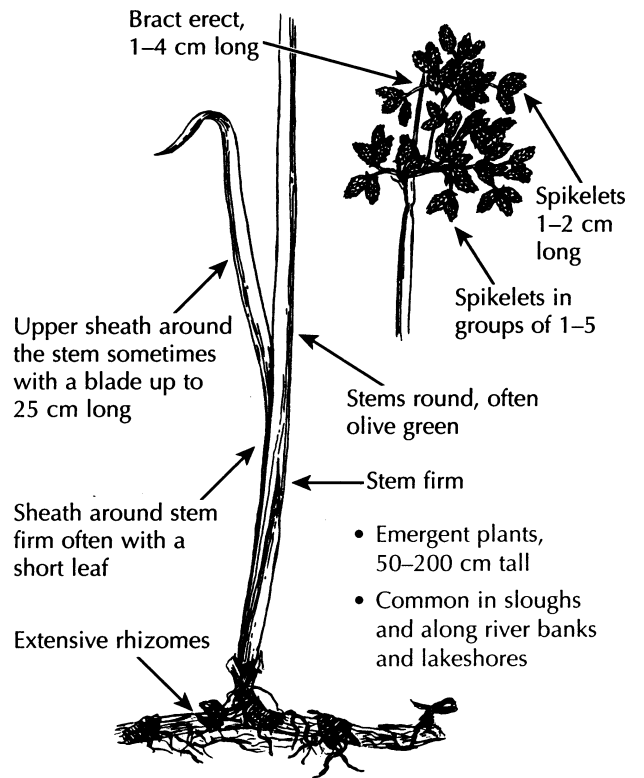
Beaked Sedge
Carex rostrata



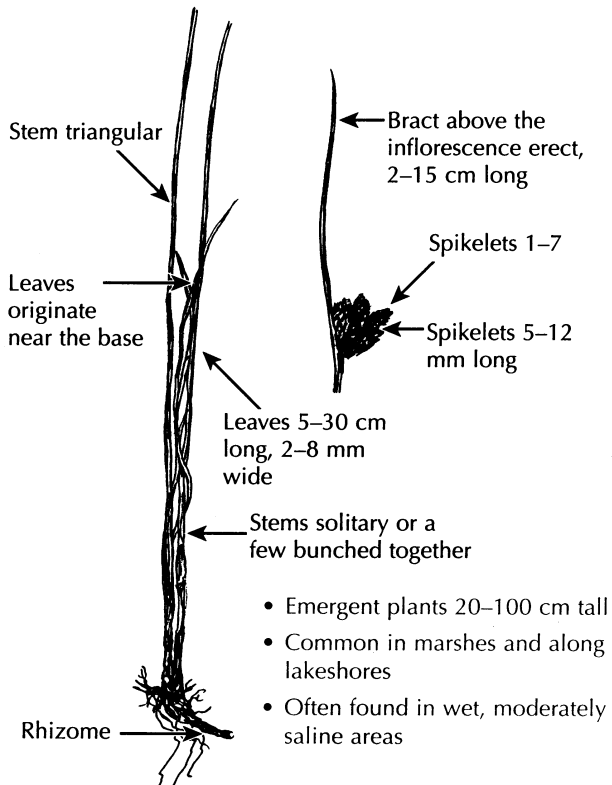
Great Bulrush
Scirpus validus



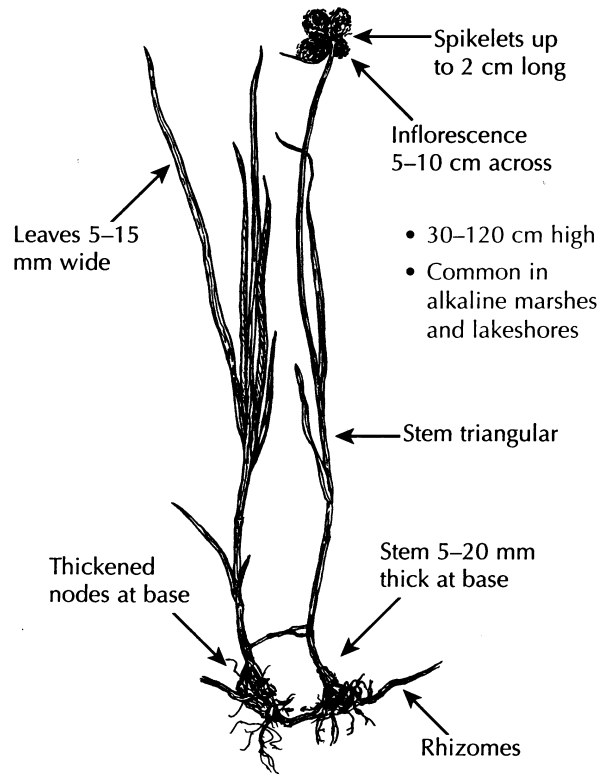
Viscid Great Bulrush
Scirpus acutus



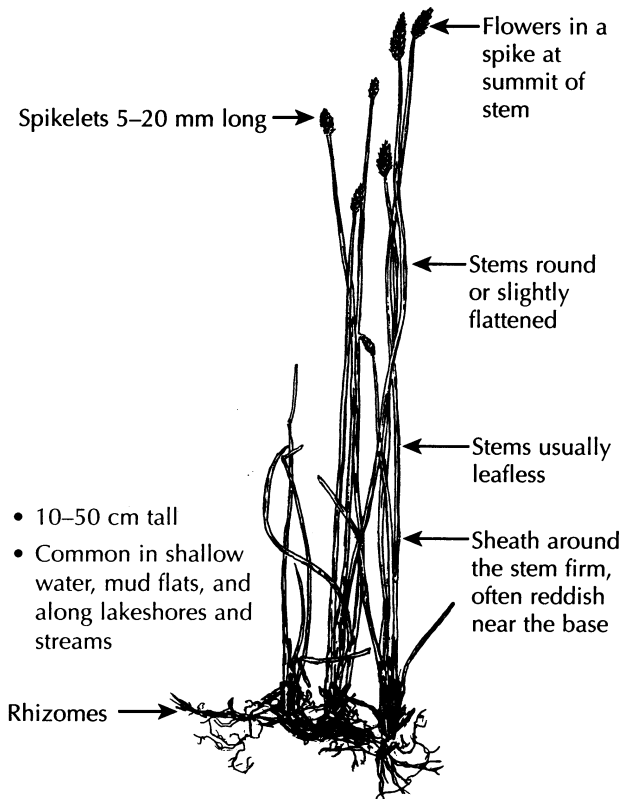
Three-Square Bulrush
Scirpus americanus



Prairie Bulrush
Scirpus paludosus



Creeping Spike-Rush
Eleocharis palustris



Flowers in a spike at summit of stem

Spikelets 5–20 mm long

Stems round or slightly flattened

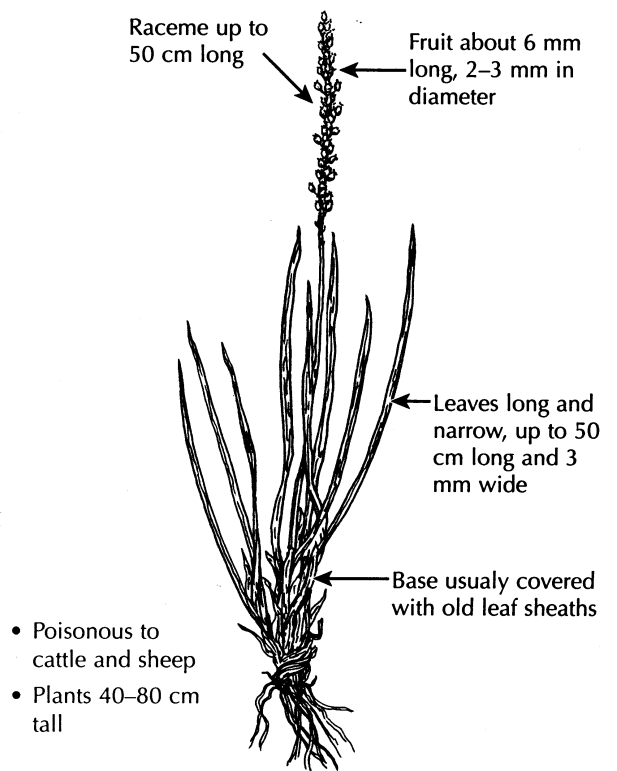
Stems usually leafless

Sheath around the stem firm, often reddish near the base

Rhizomes

- 10–50 cm tall
- Common in shallow water, mud flats, and along lakeshores and streams

Seaside Arrow Grass
Triglochin maritima



Raceme up to 50 cm long

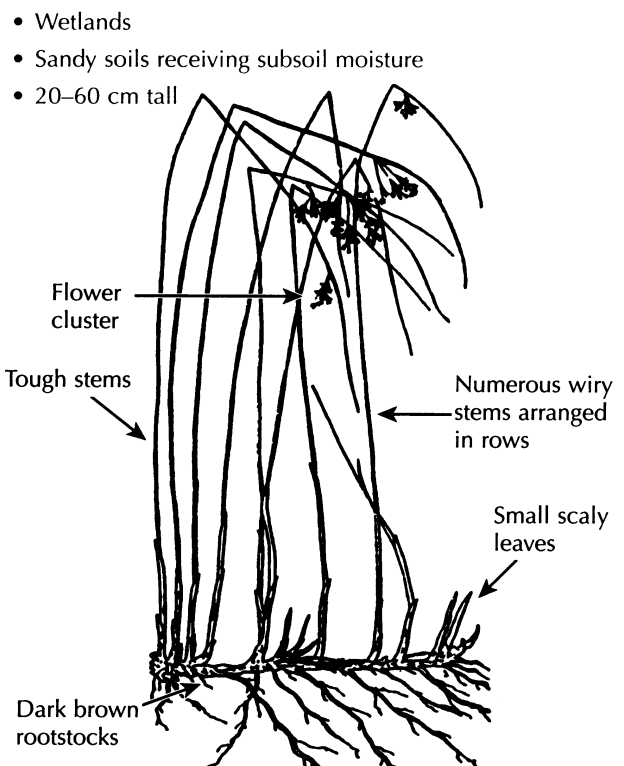
Fruit about 6 mm long, 2–3 mm in diameter

Leaves long and narrow, up to 50 cm long and 3 mm wide

Base usually covered with old leaf sheaths

- Poisonous to cattle and sheep
- Plants 40–80 cm tall

Baltic Rush
Juncus balticus



- Wetlands
- Sandy soils receiving subsoil moisture
- 20–60 cm tall

Flower cluster

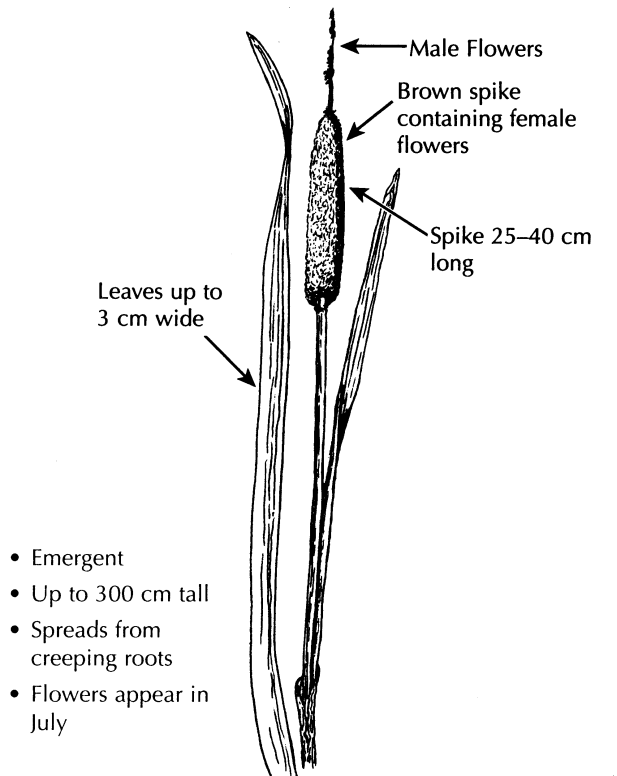
Tough stems

Numerous wiry stems arranged in rows

Small scaly leaves

Dark brown rootstocks

Common Cattail
Typha latifolia



Male Flowers

Brown spike containing female flowers

Spike 25–40 cm long

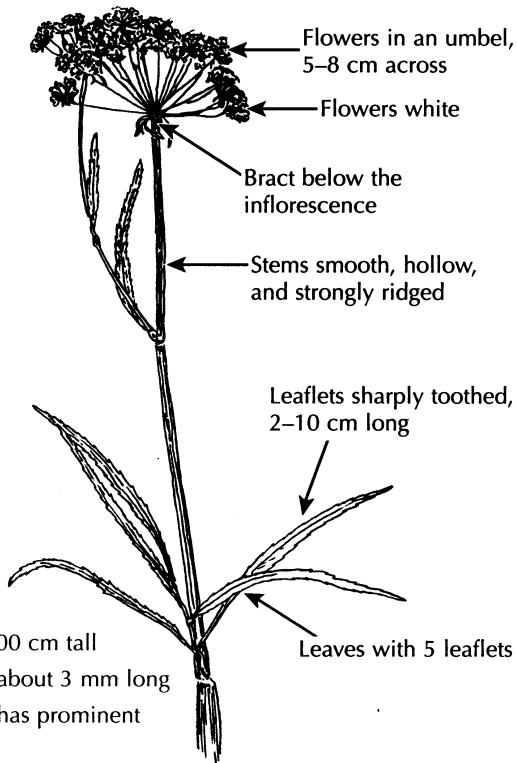
Leaves up to 3 cm wide

- Emergent
- Up to 300 cm tall
- Spreads from creeping roots
- Flowers appear in July

Forbs

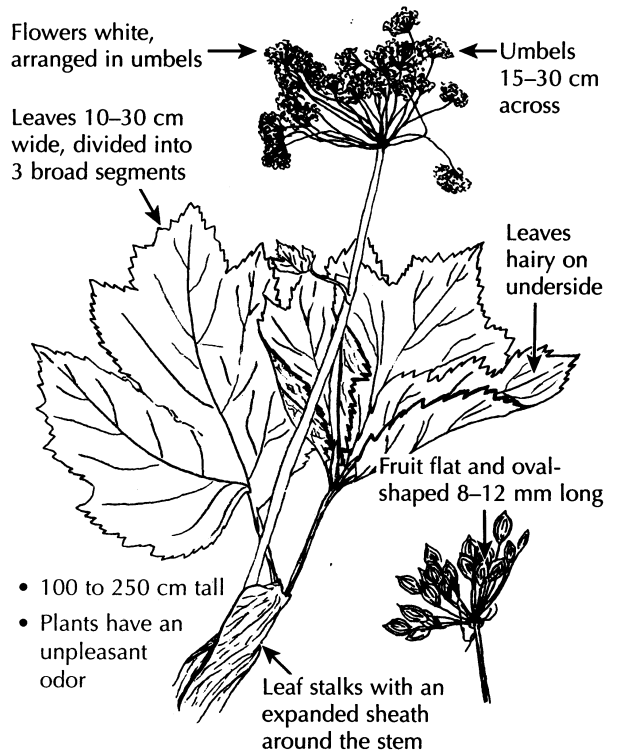
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Water-Parsnip
Sium suave



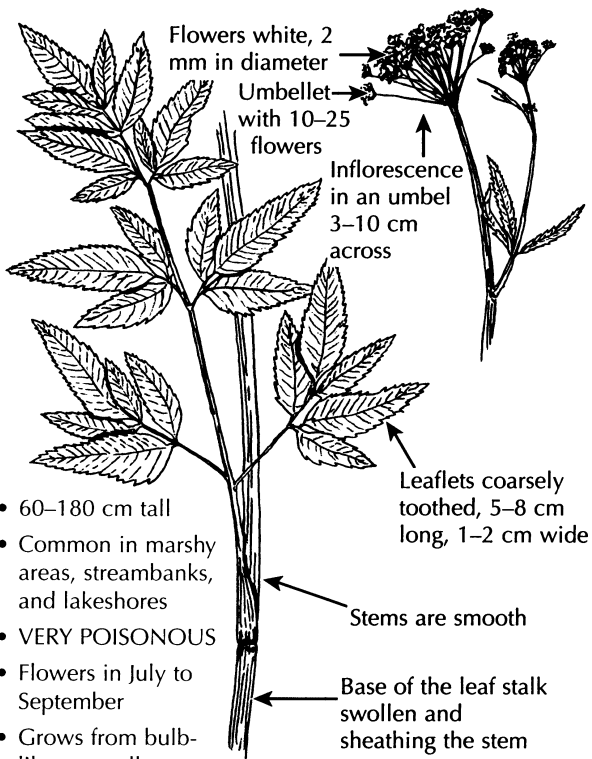
- 60–200 cm tall
- Fruit about 3 mm long
- Fruit has prominent ribs

Cow-Parsnip
Heracleum lanatum



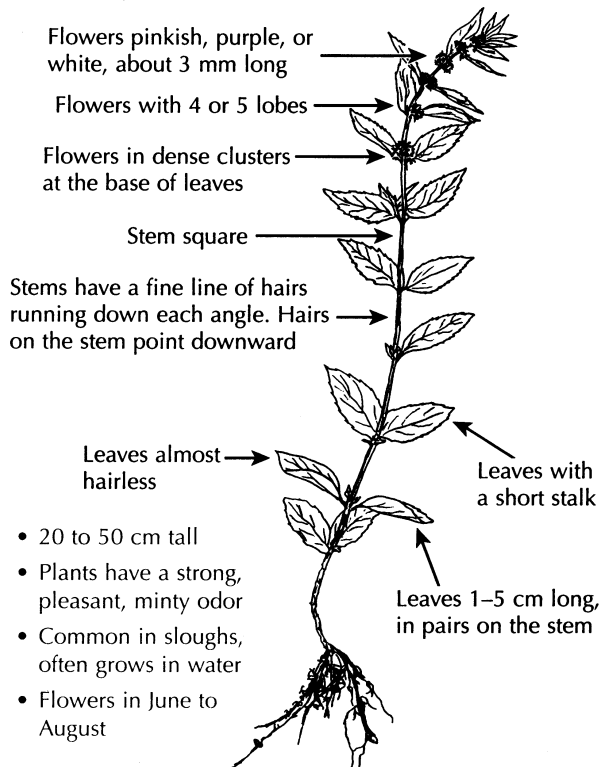
- 100 to 250 cm tall
- Plants have an unpleasant odor

Water Hemlock
Cicuta maculata



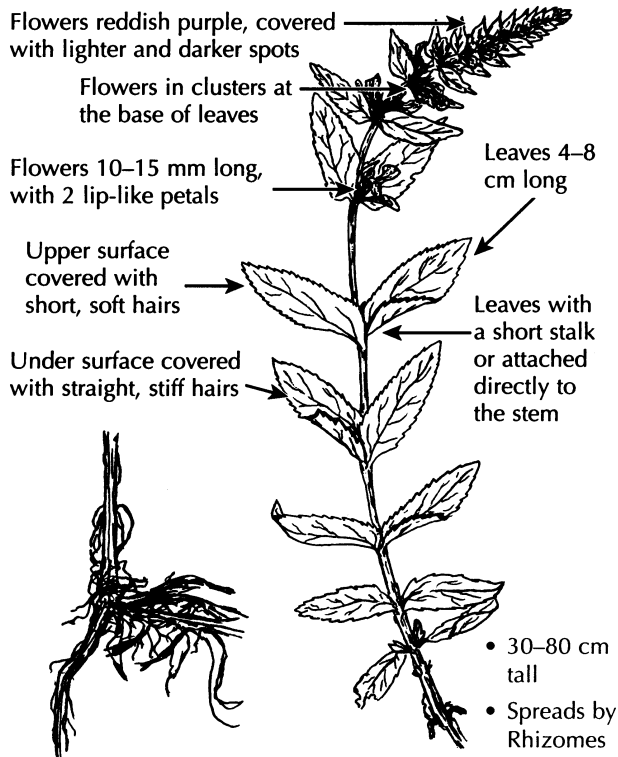
- 60–180 cm tall
- Common in marshy areas, streambanks, and lakeshores
- **VERY POISONOUS**
- Flowers in July to September
- Grows from bulb-like rootstalks

Wild Mint
Mentha arvensis

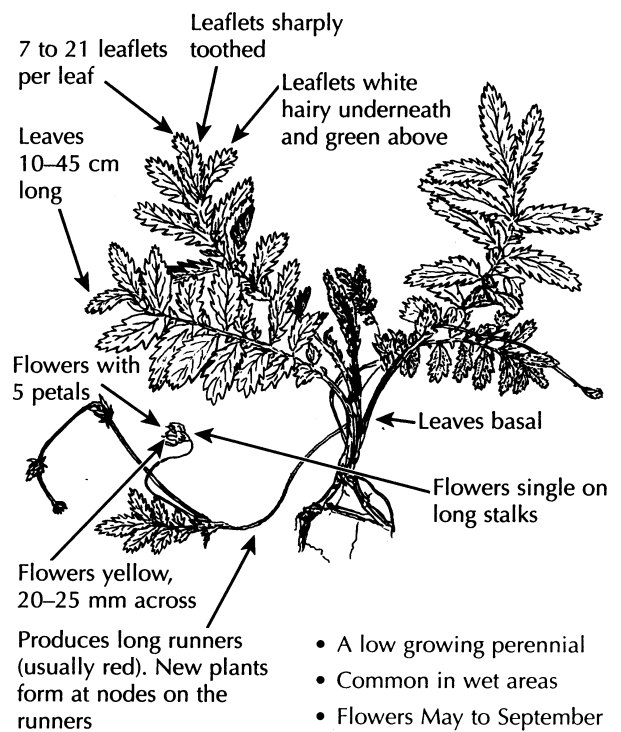


- 20 to 50 cm tall
- Plants have a strong, pleasant, minty odor
- Common in sloughs, often grows in water
- Flowers in June to August

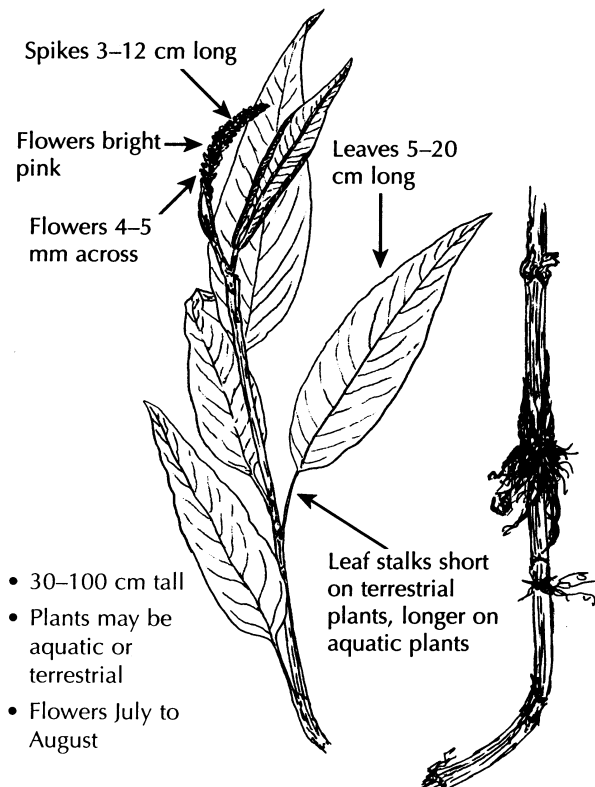
Marsh Hedge-Nettle *Stachys palustris*



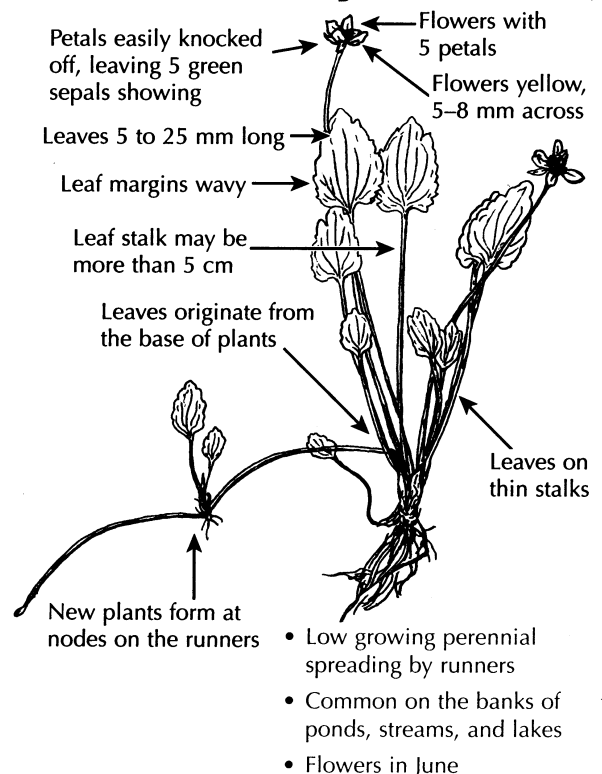
Silverweed *Potentilla anserina*



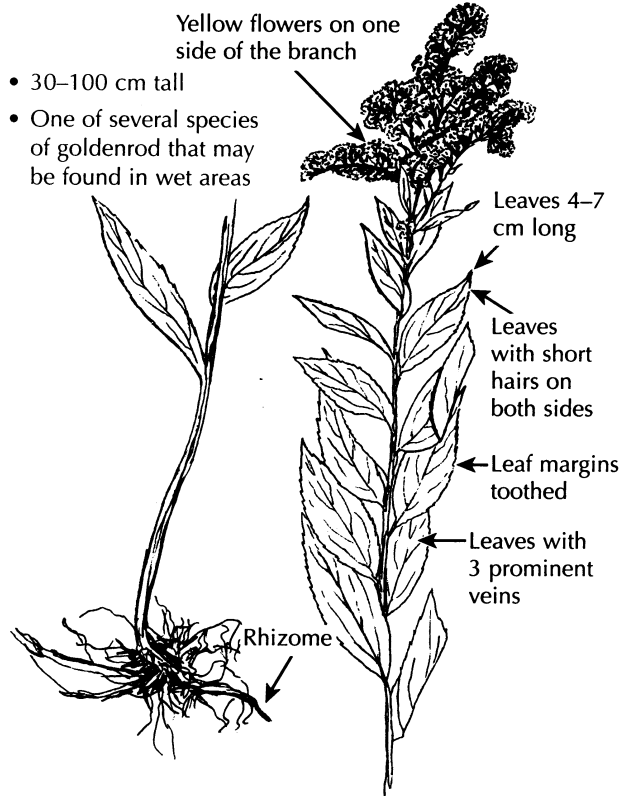
Water Smartweed *Polygonum amphibium*



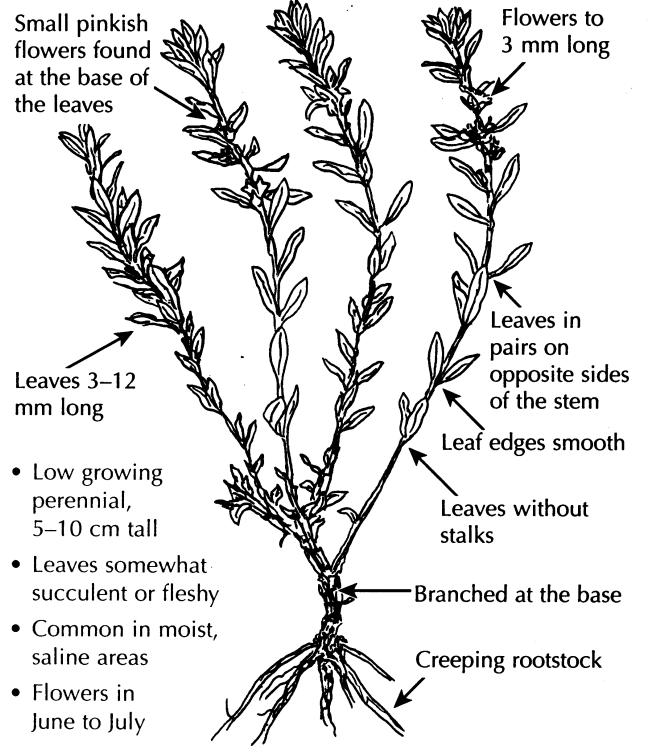
Seaside Buttercup *Ranunculus cymbalaria*



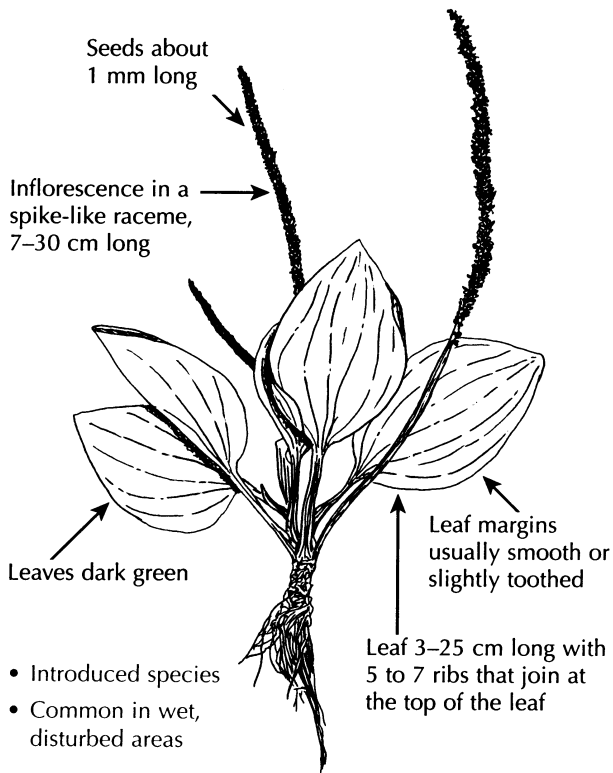
Canada Goldenrod
Solidago canadensis



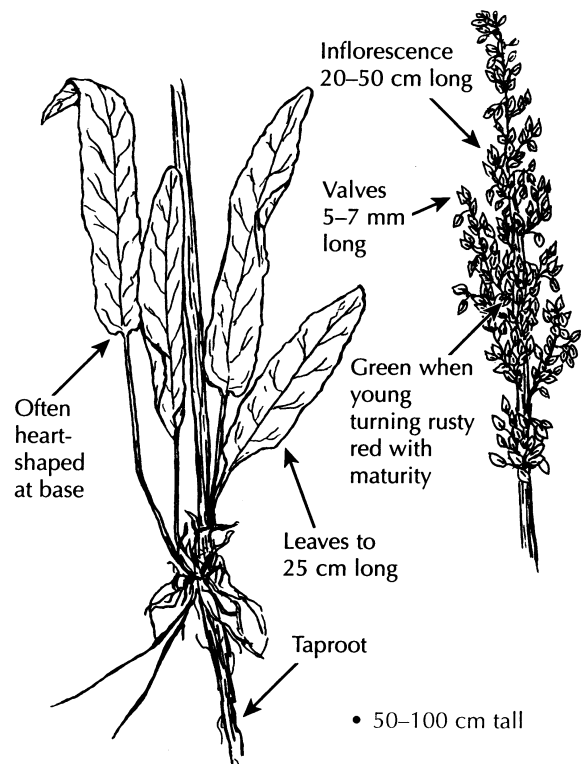
Sea-Milkwort
Glaux maritima



Common Plantain
Plantago major



Western Dock
Rumex occidentalis



Alphabetical Index by common name

Alkali cord grass	<i>Spartina gracilis</i>	12
Awned sedge	<i>Carex atherodes</i>	16
Awned wheatgrass	<i>Agropyron subsecundum</i>	11
Balsam poplar	<i>Populus balsamifera</i>	9
Baltic rush	<i>Juncus balticus</i>	18
Beaked sedge	<i>Carex rostrata</i>	16
Beaked willow	<i>Salix bebbiana</i>	4
Canada buffaloberry	<i>Shepherdia Canadensis</i>	6
Canada goldenrod	<i>Solidago Canadensis</i>	22
Choke cherry	<i>Prunus virginiana</i>	6
Common cattail	<i>Typha latifolia</i>	18
Common plantain	<i>Plantago major</i>	22
Cottonwood	<i>Populus deltoids</i>	8
Cow-parsnip	<i>Heracleum lanatum</i>	20
Creeping spike-rush	<i>Eleocharis palustris</i>	18
Fowl manna grass	<i>Glyceria striata</i>	13
Great bulrush	<i>Scirpus validus</i>	17
Green ash	<i>Fraxinus pennsylvanica</i>	8
Hawthorn	<i>Crataegus rotundifolia</i>	7
Hoary willow	<i>Salix candida</i>	4
Manitoba maple	<i>Acer negundo</i>	8
Marsh hedge-nettle	<i>Stachys palustris</i>	21
Marsh reed grass	<i>Calamagrostis Canadensis</i>	11
Narrow reed grass	<i>Calamagrostis stricta</i>	11
Northern reed grass	<i>Calamagrostis inexpansa</i>	11
Nuttall's salt-meadow grass	<i>Puccinellia nuttalliana</i>	13
Peach-leaved willow	<i>Salix amygdaloides</i>	5
Prairie Bullrush	<i>Scirpus Paludosus</i>	17
Prickly Rose	<i>Rosa acicularis</i>	7
Pussy willow	<i>Salix discolor</i>	5
Red-Osier Dogwood	<i>Cornus stolonifera</i>	5
Reed canary grass	<i>Phalaris arundinacea</i>	13
Salt grass	<i>Distichlis stricta</i>	12
Sandbar willow	<i>Salix interior</i>	4
Saskatoon	<i>Amelanchier ainifolia</i>	5
Sea-milkwort	<i>Glaux maritima</i>	22
Seaside arrow grass	<i>Triglochin maritima</i>	18
Seaside buttercup	<i>Ranunculus cymbalaria</i>	21
Silverberry	<i>Elaeagnus commutata</i>	7
Silverweed	<i>Potentilla anserine</i>	21
Slough grass	<i>Beckmannia syzigachne</i>	11
Spangletop	<i>Scolochloa festucacea</i>	12
Tall manna grass	<i>Glyceria grandis</i>	13
Thorny buffaloberry	<i>Shepherdia argentea</i>	6
Three-square bulrush	<i>Scirpus americanus</i>	17
Trembling aspen	<i>Populus tremuloides</i>	8
Tufted hair grass	<i>Deschampsia caespitosa</i>	14
Viscid great bulrush	<i>Scirpus acutus</i>	17
Water hemlock	<i>Cicuta maculate</i>	20
Water sedge	<i>Carex Aquatilis</i>	16
Water smartweed	<i>Polygonum amphibium</i>	21
Water-parsnip	<i>Sium suave</i>	20
Western dock	<i>Rumex occidentalis</i>	22
Western snowberry	<i>Symphoricarpos occidentalis</i>	6
Wild mint	<i>Mentha arvensis</i>	20
Wood's rose	<i>Rosa woodsii</i>	7
Woolly sedge	<i>Carex lanuginosa</i>	16
Yellow willow	<i>Salix lutea</i>	4

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