

A.

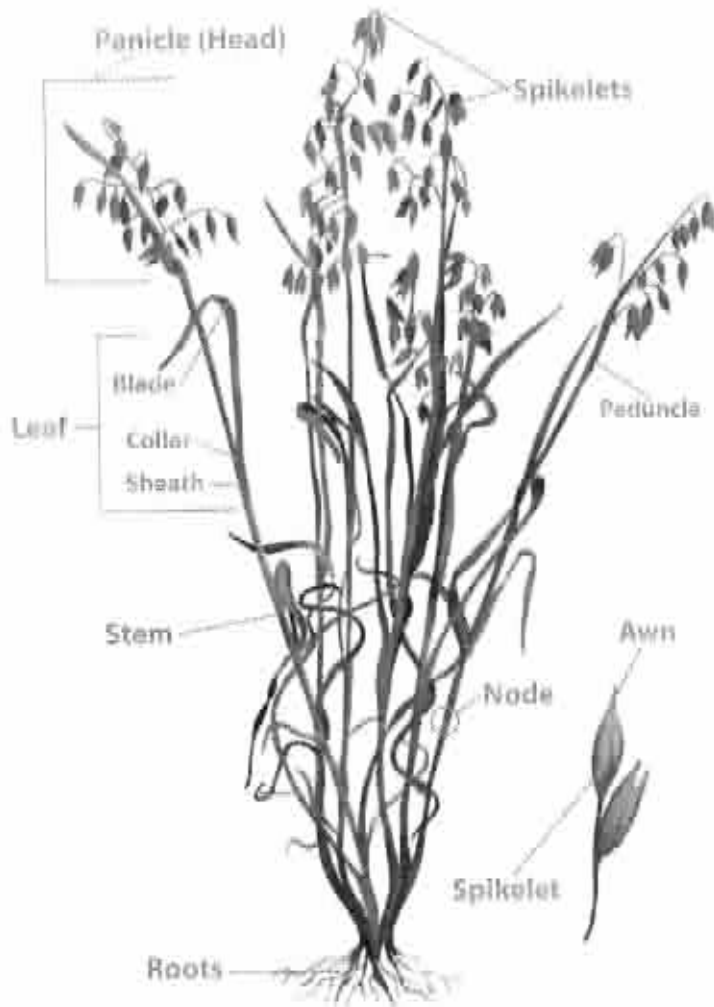
B.

C.

OATS

H. L. G.

OATS



Top 10 Minnesota Counties Producing Oats in 2007:
Otter Tail, Todd, Roseau, Fillmore, Goodhue, Wabasha,
Winona, Polk, Clearwater and Pennington

On The Front

A. Oat Head

The oat head is a cluster of branches called a panicle. Two or more seeds contained in a spikelet are located at the end of each oat branch.

B. Oat Plant

Like other small grain crops, the oat plant is an annual grass; it produces three to five hollow stems. The stems have seed clusters or flowers on their branches. The plant grows 2 to 3 feet tall under normal conditions.

C. Oat Seed

Oat seeds can vary in size. Minnesota only grows white and yellow oats. A bushel of oats typically weighs 32 pounds.

Oats

Oats are used for animal feed and for human food. Oats were discovered thousands of years ago in Egypt. They were once considered a weed and were sometimes used in medicines. The crop became popular with farmers because it is easy to grow, harvest and feed to animals. In the mid-1800s, oatmeal began to gain importance as a breakfast food. Since then, more oat products have been developed and their nutritional qualities are popular among health-conscious people.

Adaptation

Many producers choose to grow oats because they fit into most crop rotations, do well on a wide range of soil types and help protect land from soil loss. Major oat producing states are Iowa, Minnesota (ranked second nationally in 2007), Nebraska, North Dakota, South Dakota and Wisconsin.

Planting

Oats are usually planted after corn or soybeans in a rotation. A machine called a grain drill is used to plant most oats. The seeds are planted between 1.5 to 2 inches deep. In Minnesota, oats are usually planted late March to April. Fall oats, grown farther south in the United States, are planted between October and December.

Harvest

Most oats grown in the United States are harvested for grain with a machine called a combine. Oats also can be cut at the dough stage for hay or silage and fed to animals. In Minnesota, oats for grain are harvested in late July or early August.

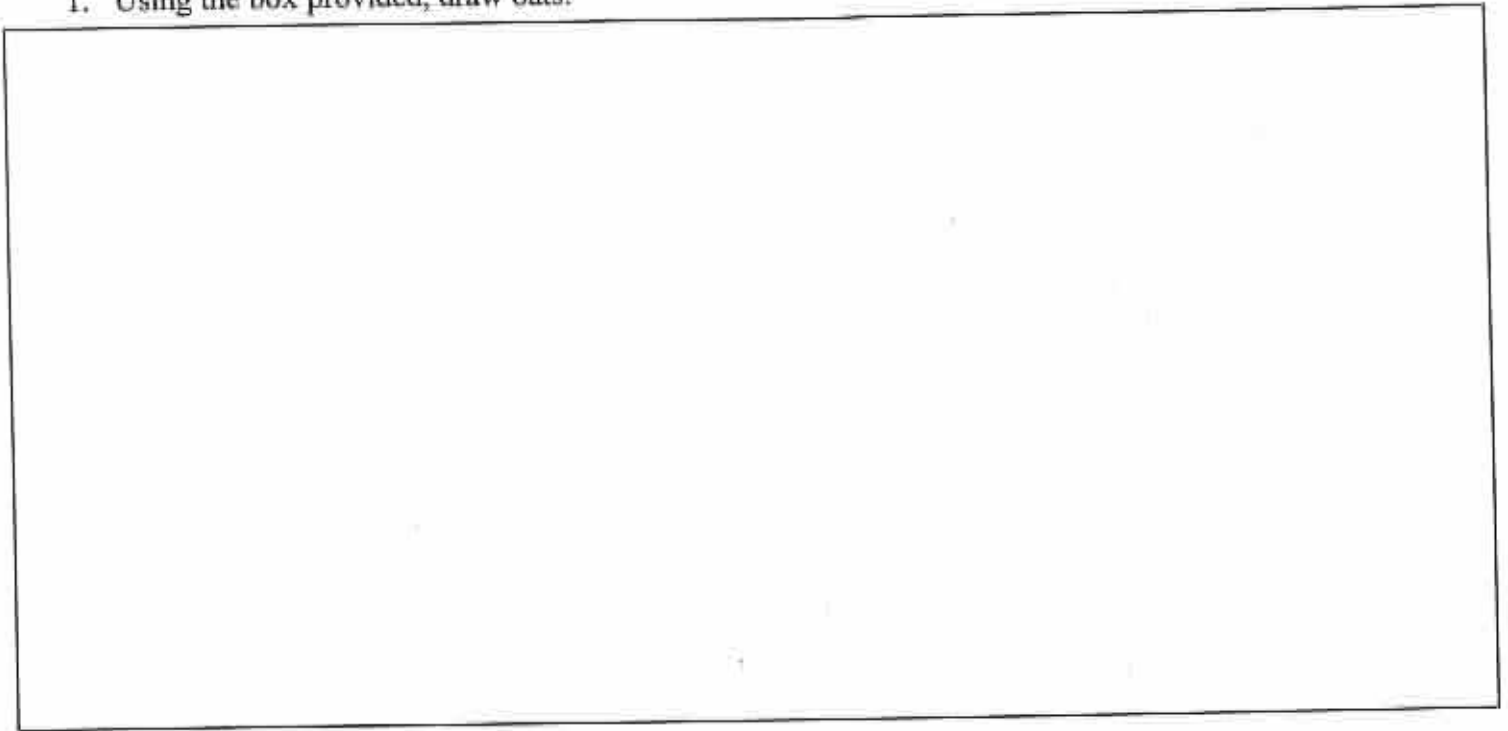
Milling

Like other grains, oats must go through a process called milling before they can be used for human food products. When oats arrive at the mill, they are cleaned to remove other seeds, weeds and sticks. Next, they are dried and the hulls are removed. Then they are cut, rolled, flaked or ground into flour.

Products made from oats include hot and cold breakfast cereals, cookies, breads, granola and baby foods. The hulls contain the chemical fufural which is used to make certain plastics.

OATS

1. Using the box provided, draw oats.



2. What are oats used for?
3. What are the major oat producing states?
4. When are oats usually planted and how?
5. What products are made from oats?
6. Using your map of Minnesota counties, create a symbol for oats and mark the top 10 counties where oats were produced in 2007.