

# Biomass Potential of Switchgrass (*Panicum virgatum*)

## Description

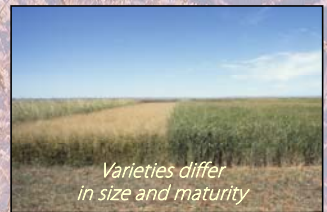


- Perennial, warm-season grass
- Native to North Dakota and most of the U.S.
- Tall, deep-rooted, and rhizomatous
- Adapted to a wide range of soil conditions
- Heavy biomass growth in late spring and early summer



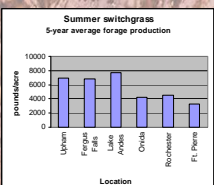
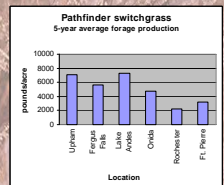
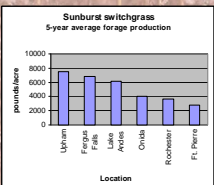
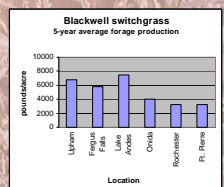
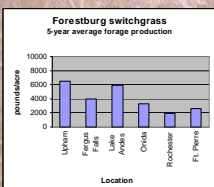
## Establishing and Managing a Successful Stand

- **Use an adapted variety** – seed origin affects plant performance
- **Choose a suitable site** – plants perform best on moderate to fine-textured deep soils with more than 14 inches of annual precipitation
- **Seed at proper depth** - seed shallow (1/4 inch) in a firm seedbed
- **Plant at recommended seeding rate** - 3.5 - 4.5 lb/ac pure live seed in North Dakota (double the rate if broadcast method)
- **Control weeds** – apply herbicide or mow
- **Fertilize** - nitrogen improves biomass yield (soil testing is recommended)
- **Plan your harvest** - delay until late summer or early fall for stand longevity and long-term biomass production



## Switchgrass Biomass and Performance Trials

- Six locations
- Five years
- Ten varieties/seed sources



Biomass yields were heavily dependent on seasonal precipitation and varieties.

