

## NDAWN Applications

**Making yesterday's weather work for you . . . today!**

### ■ Agriculture Management/Research

NDAWN crop specific models use daily weather data to estimate crop, insect, or disease development to provide information needed for management decisions for crops on your farm. These help you:

- Time herbicide applications
- Identify windows when your crops are susceptible to disease or insects
- Determine if weather conditions have been favorable for disease
- Time late blight or cercospora fungicide application
- Determine if and when to irrigate
- Estimate when wheat midge emerge
- Schedule field scouting activities

### ■ Education and Research

### ■ Environmental Research/Management

### ■ Insurance Claims/Adjusting

### ■ Meteorology/Climatology

Regional Forecasting Research  
Doppler Radar Rainfall Calibration  
Current Data for Severe Storm Research  
Climatic Data Base Enhancement

### ■ Legal Questions – Resolution

Pesticide Drift/Accidents/Storm Damage

### ■ Water Quality Management

### ■ Wind/Solar Power Potential

## Contact Us

### Visit online:

[www.ndawn.ndsu.nodak.edu](http://www.ndawn.ndsu.nodak.edu)

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*NDSU is an equal opportunity institution*



## North Dakota Agricultural Weather Network



# NDSU

North Dakota State University  
Fargo, North Dakota

Visit our Web site at  
[ndawn.ndsu.nodak.edu](http://ndawn.ndsu.nodak.edu)

Data and information presented  
in tables, maps or graphs are **FREE.**

[ndawn.ndsu.nodak.edu](http://ndawn.ndsu.nodak.edu)

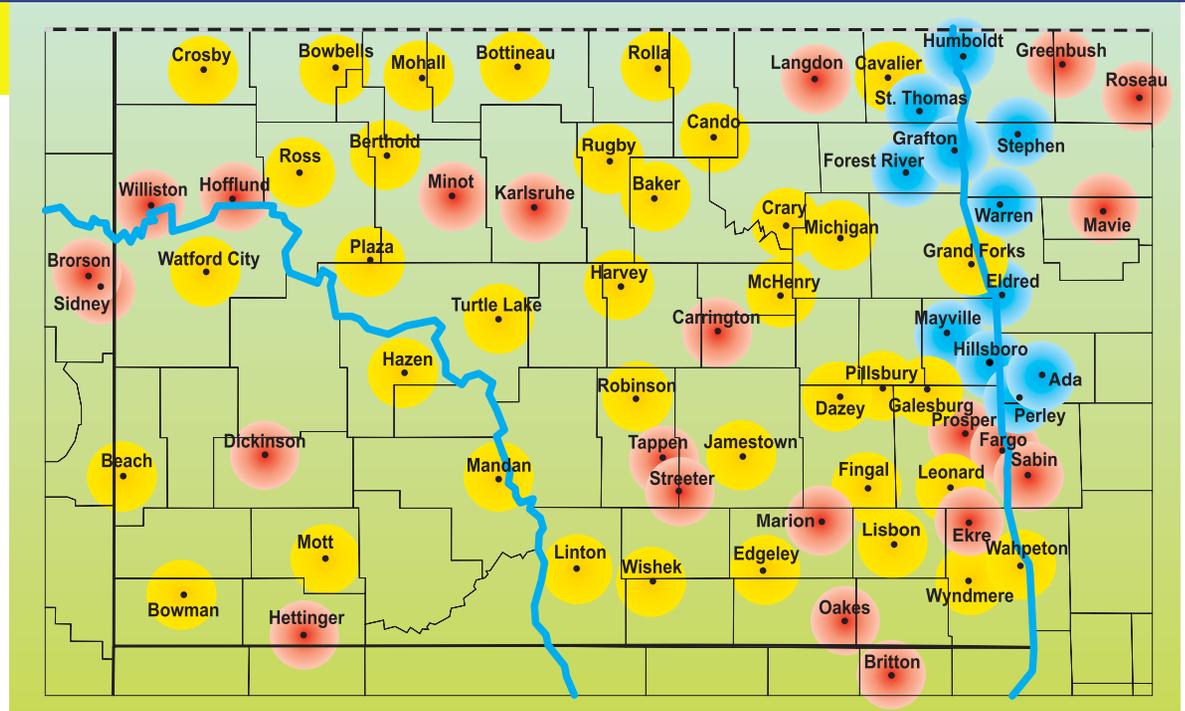
# What is NDAWN?

The North Dakota Agricultural Weather Network (NDAWN) was established in 1989 with 6 stations to provide detailed weather data across North Dakota. Today it consists of 70 stations that monitor weather conditions continuously and provide hourly and daily summaries. All data and numerous applications are available free via the Internet — [ndawn.ndsu.nodak.edu](http://ndawn.ndsu.nodak.edu).

Measured and calculated variables include:

- Air temperature
- Degree days (growing, insect, etc.)
- Dew point temperature
- Relative humidity
- Rainfall
- Wind speed and direction
- Potential evapotranspiration
- Crop water use estimates/projections
- Soil temperature
- Solar radiation
- Air pressure

# NDAWN Station Locations



Colored circles have 40-mile diameters which is the approximate area each station is assumed to represent. This is a reasonable assumption for all variables but rainfall.

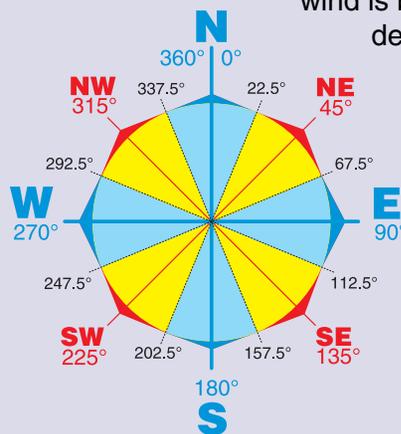
## NEW! All stations have voice!

Just call and hear current conditions.

- County where station located
- Central Standard Time – 24 hour clock (all stations use CST all the time)
- Total rain since midnight
- Current air temperature
- Minimum air temperature since midnight
- Maximum air temperature since midnight
- Average wind direction – past 10 minutes
- Average and maximum wind speed – past 10 minutes
- Current relative humidity
- Current dew point temperature
- Current bare soil temperature – 4-inch depth

## What does wind direction mean?

Voice modems report the direction the wind is blowing from, in degrees measured clockwise from north. Since direction is variable, a 10-minute average is reported.



## NDAWN stations sponsorship indicated by color:

Most non-labor annual operational costs are funded by gifts and grants from government agencies or local businesses, commodity groups, crop improvement clubs and producers.

- Red: Research — NDSU/Private
- Blue: Sugarbeet producers
- Yellow: Local crop improvement associations/producers, businesses