

# Weather & Birds

April 2022

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This page can be found on **Big Bluestem Audubon Society's website**, under Resources, Birds & Weather  
<http://www.bigbluestemaudubon.org/Resources/Weather.aspx>

## Bird Migration Forecasts in Real Time

<http://Birdcast.info> Online since 2018! Live Migration (Intensity) Maps based upon NWS radar network data. Migration Forecasts for the next three nights. Study resources on this site to build expertise.

Accompanying scientific paper:

<https://www.biorxiv.org/content/biorxiv/early/2018/04/02/293092.full.pdf>

**University of Wisconsin Radar Composites** <https://tempest.aos.wisc.edu/radar/us3comphtml5.html>

Or select a region for a detailed view of weather and migration in action.

[https://www.aos.wisc.edu/weather/wx\\_obs/Nexrad.html](https://www.aos.wisc.edu/weather/wx_obs/Nexrad.html)

**Check out what happened overnight from Paul Hertado – radar loop**

[http://www.pauljhurtado.com/US\\_Composite\\_Radar/recent.html](http://www.pauljhurtado.com/US_Composite_Radar/recent.html)

**Current Wind Streamlines – Beautiful!** <http://earth.nullschool.net/>



## NWS Des Moines web page

<http://www.weather.gov/dmx/> or <http://www.weather.gov/dvn/> for Quad Cities NWS

Roam this page to find current local radar data and weather forecasts, warnings and observations.

It isn't easy to get a big picture view of all NWS radars to monitor bird migration, but it can be done. Go to <https://radar.weather.gov/> and click Select View in the black box in the upper left. From there, click on National Radar. This will give a QCD (quality controlled) radar view but that eliminates most migration signatures. Click the little arrow next to BREF.QCD and pick Raw Base Reflectivity. Now you have a national loop that you can zoom and roam around.

**College of DuPage Weather** <http://weather.cod.edu/satrad/>

One of the few sites to get free NWS Dual-pol "Nexrad" radar data. Click on Composite Radar to get a nationwide loop of raw radar. To view individual Nexrad sites, select Dual-Pol NEXRAD. This defaults to Chicago radar. To find other locations, click the little round button in the upper left (Radar Selection) and click a dot on the map. Select different radar variables from bar on left.

**NCAR Real-Time Weather Data** <http://weather.rap.ucar.edu/>

Current weather, current and archived single-site radar data, forecasts.

Click Forecasts. Quick-look charts are on the right. Switch between model plots. RAP (next 12-18 hours), NAM (next 3 days), GFS (up to a week). 925mb winds are good at bird migration height (1000-1500 ft over Mississippi valley).

**Pivotal Weather** <https://www.pivotalweather.com>

Similar to above. Good looking charts, but with ads.

**NOAA/NWS National Centers for Environmental Prediction-** Forecast numerical model graphics

<http://mag.ncep.noaa.gov>

Click on Model Guidance, in the Model Area click "CONUS", in the Model Type click NAM or GFS then select 10m\_wnd\_precip for surface winds and predicted precipitation.

**An App to Try???** Check out **Windyty**. Note: Their radar data will not show migration signatures but the wind streamlines are beautiful and useful. Sample at <https://www.windy.com>

**Plymouth State Weather** <https://vortex.plymouth.edu/mapwall/regionalrad/radar.html>  
Lots of regional radar maps to track migration. Many other options under Radar.

### **Learn about Weather, Bird Migration, and Radar**

<http://Woodcreeper.com>

No more current posts, but Archives are a great place to learn about the impacts of weather during migration. Scroll far down on the lower right to where you see Spring Migration 2005-2013.

**University of Illinois- UIUC**

Weather Education- click on “Online Guides”

[http://ww2010.atmos.uiuc.edu/\(Gh\)/guides/home.rxml](http://ww2010.atmos.uiuc.edu/(Gh)/guides/home.rxml)

Good comprehensive list of weather links from the University of Illinois

<https://atmos.illinois.edu/resources/weather-links>

**E-Bird Understanding Radar and Birds** – very basic.

<https://ebird.org/news/radar/>

[Weather Radar Tracks Storms, Rain ... And, Sometimes, Birds - WABE](#)

**Radar Technology - A Tool for Understanding Migratory Aerofauna**

<https://www.usgs.gov/centers/norock/science/radar-technology-tool-understanding-migratory-aerofauna>

**Partly Cloudy with a Chance of Migration: Weather, Radars, and Aeroecology**

<http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-11-00099.1>