

Appendix D

Beaufort Wind Scale – Tetraflexagon (Front Template)

- To make this a little bit easier, you can visit the 4-H Power of the Wind curriculum website (www.4-H.org/curriculum/wind) to find the downloadable tetraflexagon template. Print it out using the printer's 2-sided option. The squares should line up perfectly. If you fold on the center red vertical line and then cut horizontally you don't have to poke with scissors. Then open to cut the vertical line.
- Draw illustrations in each of the squares that contain small print.
- Follow the instructions for folding on pages 10–11.

4 47–54 mph Strong gale	4 antennas break	3 umbrellas hard to use	2 leaves move
2 13–18 mph Moderate breeze	3 32–38 mph Near gale	4 55–73 mph Whole gale/ Violent storm	4 trees uproot, widespread damage
4 more than 74 mph Hurricane	4 hurricane	3 difficult walking	2 trees sway

Appendix E

Beaufort Wind Scale – Tetraflexagon (Back Template)

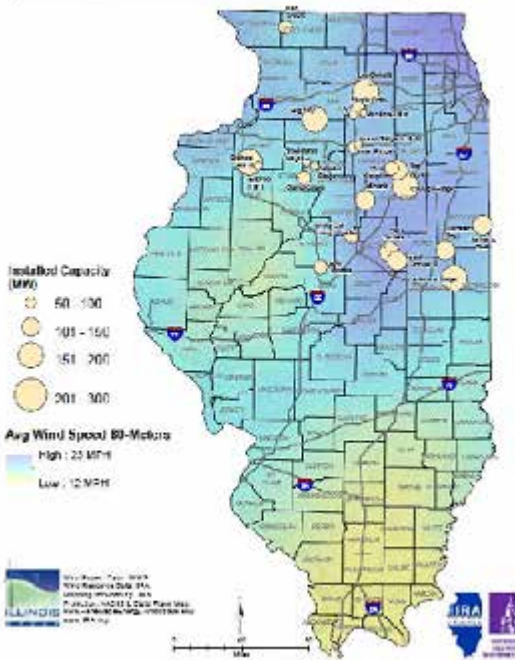
1 less than 1 mph Calm	1 smoke rises	2 8–12 mph Gentle breeze	3 25–31 mph Strong breeze
3 flags extend	2 branches move	1 1–3 mph Light air	1 smoke drifts
1 4–7 mph Light breeze	1 flags stir	2 19–24 mph Fresh breeze	3 39–46 mph Gale

Appendix G

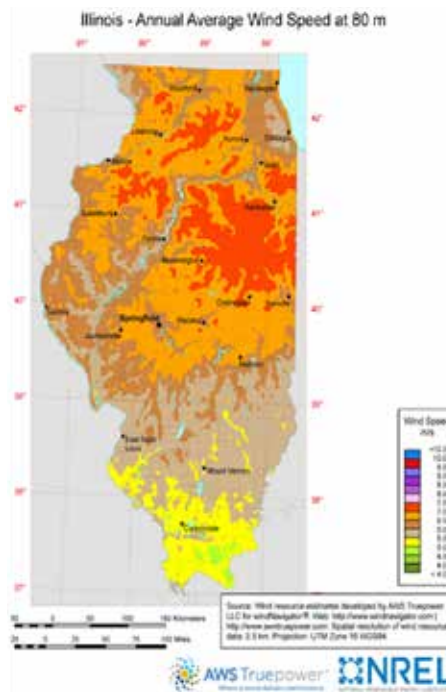
Where the Wind Blows in Illinois

- Where are areas in Illinois designated “good” for wind power?
- Which of these areas have operational or proposed wind farms?
- Why are the wind speeds on the Wind Resources Map given at 80 meters?

Wind Projects and Wind Resources 2013



This map shows wind projects in Illinois. The shading also indicates wind resources.



Larger versions of these maps can be found at www.4-H.org/curriculum/wind.



Illinois Rural Electric Cooperative

owns a 1.65 MW turbine in Pike County, Illinois. The hub is 235 feet tall and at its highest point the turbine is 365 feet tall. It generates enough electricity to power about 500 homes. It operates when the wind blows 5–55 mph. Where is Pike County? What does the wind map of Illinois show us about the Pike County area?



Twin Groves Wind Farm

This project is located in eastern McLean County, Illinois. Its 240 (1.65 MW) turbines have the potential to power about 120,000 homes. What does the Wind Resource Map show about the site of this wind farm? The best solution to high electricity need is a variety of energy sources.