## Conservation Corner

By Corinne Peterson Pocahontas County Naturalist



April 5, 2017

"Sometimes I go about pitying myself, and all the while I am being carried across the sky by beautiful clouds."

This Native American proverb from the Ojibwe tribe will introduce this week's celestial friend – the beautiful clouds. Whether driving to work as the sun rises or sitting on the porch as night falls, sky watching is a fitting way to both start and end the day. Where is your favorite place to watch the clouds go by?

Before 1800, clouds were poorly understood and unnamed, identified only as "essences" floating in the sky. All that changed with the



interest of a young Englishman, Luke Howard. During his school years, volcanic eruptions in Iceland and Japan created vivid sunrises and sunsets across Europe. To his young mind, there must be some cause and effect going on, and he wanted to know more. In 1802 Howard presented a paper classifying clouds into four groups. The first three – cumulus (heap), stratus (layer), and cirrus (curl) – are based on cloud shape while nimbus (rain) clouds generate precipitation.

In 1896, almost a century later, the World Meteorological Organization published its first cloud atlas. This invaluable reference tool identified 10 genera of clouds and included 28 colored photos. Recently, on March 23, the first updated edition of the International Cloud Atlas in 30 years was unveiled. Available as a web portal, the site is accessible to everyone.

The new atlas recognizes 12 new types of clouds. One new species of clouds has been identified – the volutus or roll cloud, a low tube-shaped cloud that rolls about on its horizontal axis. Perhaps the best known newcomer is the asperitas cloud formation which resembles tossed sea waves with peaks of meringue. From the Latin for rough-like, asperitas clouds were first recorded in 2006 over Cedar Rapids, Iowa, and are pictured above.

Other new cloud types include cavum (hole punch), cauda (tail cloud), fluctus (wave-like), flumen (accessory cloud), and murus (wall cloud). Also recognized are flammagenitos clouds that form above wildfires or volcanoes as well as homogenitas clouds that are caused by human activity and appear above factories or as contrails from airplane exhaust. Even some weather features not traditionally thought of as clouds have been included, things like rainbows, halos, snow devils, and hailstones.

You may be wondering what has brought about this increased interest in the sky. In one word – technology. You no longer have to be an official weather observer or know the finer points of the International Cloud Atlas. Now all you need to record and send in images of fleeting cloud formations is a smart phone, and people around the world are doing just that.

In closing, I encourage everyone to pause in your sky gazing long enough to attend the 11<sup>th</sup> Annual Garden Extravaganza. Join us this weekend, Friday April 7 from 5:00 to7:00 p.m. or Saturday April 8 from 9:00 a.m. to 1:30 p.m., at the Expo Center in Pocahontas. Whether the skies are cloudy or clear, we hope to see you there!