

MAY/JUNE 2020 Meadowlark (abbreviated version)

President's Column

Coronaviruses and Climate Change

In the last decade or so a number of zoonotic diseases, diseases passed from animal to humans, have increased. Ebola, avian influenza, H1N1 flu virus (or Swine flu), Middle East respiratory syndrome (MERS), sudden acute-respiratory syndrome (SARS) and West Nile virus. These viruses could cause major pandemics and economic loss. Researchers don't know exactly at what point the SARS-CoV2 virus crossed from an animal to a human and presented as Covid-19, but, it will not be the last pandemic we experience.

The 2016 United Nations Environment Programme pointed out that 75% of emerging infectious diseases in humans are zoonotic. Zoonotic diseases are closely interlinked with the health of the ecosystem. Healthier ecosystems are more diverse and have rich habitats. Zoonosis thrives on changes in the environment, animal, human host or itself. Those changes are generally not for the better; lack of water, too much water, unseasonal heat or cold.

In the last century, human population growth, habitat and ecosystem destruction and biodiversity loss have given pathogens opportunity to grow. Our populations keep getting closer to the spaces that animals once lived in peace.

Changes in temperature, humidity, and seasonality affect the survival of microbes. Evidence suggests that epidemics will become more frequent as climate change continues. Those among us without resources will truly be challenged.

In developing countries economic growth and demographics have shifted from rural to urban areas. The demand for dairy and meat has followed, our "Western Diet." Expansion of cropland and intense livestock farming near and around cities increases the opportunity for exposure. Livestock often serve as epidemiological bridges between wildlife and humans. One of the other methods by which these viruses cross from animals to humans is the sale of wildlife in public markets. Early cases of SARS were associated with caged civet cats being sold in a market and Ebola is believed to have come from tainted gorilla meat bought and eaten in Central Africa.

More biodiverse ecosystems are more inherently resilient. Genetically similar livestock and poultry are more susceptible to viruses to be transmitted from wildlife. Years ago a poultry farmer in the Mid-West ordered chicks from an eastern country (China, Japan, ex.). When the chicks arrived, they were released into the general population at the farm. The only problem was the chicks had come in contact with wild birds that had avian flu in their home country. Because all of the chickens were genetically similar, they all had to be destroyed, thousands of them. The lack of biodiversity in the eastern United States has allowed the spread of West Nile virus (not enough mosquito-eating birds) and Lyme Disease (not enough predators for deer.)

The United Nation Executive Director, Inger Andersen, has observed that, “We are intimately interconnected with nature, whether we like it or not. If we don’t take care of nature we can’t take care of ourselves.” We will have to fundamentally reshape our relationship with nature. In the next decade the UN and its partners will be “focusing on building political will and capacity to restore humankind’s relation with nature.”

Take this time while you are home to think about how much energy or gasoline you have saved by being at home. Do you think you might be able to work part time from home when life goes back to normal? Do you really need to run all those errands? Think about putting native bushes and plants in your yard for the birds to eat the insects and berries. These are all things that you can do to reduce green house gas emission.

Reference: Coronaviruses: are they here to stay?

03 April 2020, United Nations Environment Programme

<https://www.unenvironment.org/news-and-stories/story/coronaviruses-are-they-here-stay>

GVAS Activities

– **all are pending due to Covid-19; check website and Facebook for updates**

Water Chestnut Pulls - July 25 and Aug 15, 2020, 9:00 am - pending

This summer GVAS will be working with the DEC to remove the invasive European water chestnut plants from Braddock Bay that would otherwise cover the bay. We need your help. So join us on Saturday July 25 and August 15. Bring your canoe or kayak and dress for the weather. We will meet at the Braddock Bay Tavern, 372 Manitou Rd, Hilton.

Contact June Summers, summers@frontiernet.net or (585) 355-1824 if you are interested in participating.

Sept 26, 2020 @ 9 am GANONDAGAN STATE HISTORIC SITE - pending

Saturday, Sept. 26, 2020, 9:00 a.m.

We will look for sparrows in the brush and other migrating birds near the parking area, and then walk about two miles round trip on the Seneca Trail beside fields and in the woods along Trout Brook. We’ll meet in the main parking lot off County Road 41/Boughton Hill Road **at 9:00 a.m.** The lot is situated below the SACC at 7000 County Road 41, Victor, NY 14564. (From Rt. 444 from Victor, turn right onto Boughton Hill Road and go down the hill. The main parking lot will be on your right.) From there we will carpool down Rt. 41 about 0.5 mi to a small parking area on the left.

Leader: Amy Kahn 585-310-2330 and co-leader June Summers 585-355-1824.

September Program
Bird of Prey

Sept. 22, 2020, 7:30 pm - **pending**

Irondequoit Public Library, Rm 113, Lake Ontario Room, 1290 Titus Avenue, 14617

“Bird of Prey” is the stunning story of the critically endangered great Philippine eagle with the remarkable story of wildlife cinematographer Neil Rettig and a small group of conservationists from the Philippine Eagle Foundation, who work tirelessly to save the bird from extinction.

The film follows Rettig’s return to the Philippines 36 years after he and his crew captured the first-ever recorded images of the eagle in the wild. Decades later, Rettig returns to the Philippine jungle on a grueling expedition to find the reclusive raptor and once again film a pair of eagles as they attempt to raise a newborn chick.

With fewer than 400 breeding pairs left in the wild, the Philippine eagle is considered the world’s rarest bird of prey and the future survival of the species is in doubt.

– *Pat Leonard*