

CREATION CARE GREEN TIPS - OCTOBER

***Inform and inspire your congregation as stewards of the earth
For Your Church's Bulletin, Newsletter, Facebook, or Creation Care Teams***

Written for the current month, most are usable at other times. Please share them with your congregation and others!

These Green Tips are researched, written, and compiled by a member of the EcoFaith Network's Leadership Team from the Lutheran Church of the Cross, Nisswa.

For more resources for nurturing earth stewardship in your congregation, go to <http://www.nemnsynod.org/eco-faith.html> or find us on Facebook. You may also email us at ecofaith@nemnsynod.org.

-- *The Leadership Team of the Northeastern Minnesota Synod EcoFaith Network*

1. Our monarch butterflies are now making the marathon migration **2,000 miles** south to their wintering grounds in the oyamel forest in Michoacan, Mexico. These beloved insects have a **two- to six- week lifespan**, and it takes them between **three and four generations to make their springtime migration as far north as Minnesota**. While numbers have rebounded a bit for the eastern monarch (due to a flurry of **milkweed planting** after monarch numbers plummeted in 2014), both the eastern and western monarchs face **serious challenges due to habitat loss** as they make their way to their summer home in Minnesota and elsewhere. Their wintering grounds in Mexico **are under threat from logging and development**, with monarch populations in danger of cratering as a result. **YOU CAN** create your own **nature sanctuary filled with native species**, helping to provide more numerous patches of habitat that enable migration, and purchase flowers and seeds **verified to be free of neonicotinoid pesticides (neonics)**, which make the entire plant - **including its pollen and nectar - toxic to butterflies**.

2. The Nobel Conference "**Climate Changed: Facing Our Future**" at Gustavus Adolphus College on Sept. 24 and 25 confirmed that unless steps are taken to **reduce carbon emissions and slow global warming**, seas will rise, conservatively, by **3 feet by the end of the century**. **Oceans** are getting warmer and more acidic, with loss of oxygen for marine life, while **Arctic June snow** has shrunk **more than half** since 1967. **Arctic sea ice** is down almost **13% per decade since 1979**, and accelerating ice melting (2006 to 2015) from **Greenland and Antarctica is at 720 billion tons** of ice a year. **Acidic and warming oceans** are destroying the coral reefs that incubate much of the marine life we depend on, a warning signal that we face harm to people, plants, animals, food, societies, infrastructure and the global economy. **The worst-case scenarios can still be avoided, IF WE CHOOSE** to address the **emissions of heat-trapping gases**.

3. Since a bipartisan Congress adopted the **Clean Air Act** in 1970, states have been allowed, until recently, to either set their own fuel emissions standards, or adopt the federal regulations. While emissions from **power plants and energy production** in Minnesota have fallen drastically, emissions from **cars, SUVs and other vehicles** have remained flat since 2009, prompting lawmakers to address the need for newer standards that would save money on gas, reduce carbon emissions, and improve health. Now **Minnesota, along with 23 other states**, is moving to **reduce the state's total greenhouse gas emissions by up to 5% within five years** to help offset the failure of meeting the Minnesota bipartisan goal of 2007 to **cut the state's carbon emissions 15% by 2015 and 80% by 2050**. Taking action on fuel emissions would not apply to cars currently on the road or hinder the sale of trucks and SUVs, but it would increase **the number of electric or hybrid vehicles with ultralow or zero tailpipe emissions** offered to consumers every year. **SUPPORT MINNESOTA'S EFFORTS** to lower carbon emissions that trap heat in our atmosphere and oceans.

4. A recent large-scale study found that **three billion birds have been lost from North America since 1970**, which is more than a quarter of the total bird population. According to the American Bird Conservancy, the **worst-hit bird groups** are insect-eating birds such as swifts and swallows, grassland birds like meadowlarks, and longest-distance migrants such as cerulean warblers and wood thrushes. There now are **40% fewer Baltimore orioles and 25% fewer blue jays and juncos**. **The loss and degradation of high-quality habitat** is the greatest cause of bird declines, which can be addressed by **better management of public lands** that are too often exploited for extractive uses instead of nature-based and recreational uses. On **private lands**, policies encouraging **conservation, sustainable agriculture, controlling erosion and creating jobs in nature-based tourism** should be enacted. **AT HOME** you can **keep cats indoors (or in an outdoor enclosure or even on a leash)**, add **decals or other bird deterrents to glass windows** and **eliminate harmful pesticides from your yard that kill the beneficial insects birds need**.

5. Most conservationists agree that **climate change** is the greatest long-term threat to **birds and other wildlife**, and view **wind power** as one of the **key renewable energies** that could replace our fossil fuel-dominated energy system, according to the National Wildlife Federation. During the past decade, the U.S. more than **tripled its wind energy capacity, supplying more than 6 % of the nation's electricity** on wind farms that often cover thousands of acres with towers reaching 300 feet into the sky and blades more than 250 feet long, creating a **risk of collision** with birds and bats. Estimates of birds killed range from about **200,000 to as many as half a million**, contrasting with **agricultural pesticides (killing 67 million), automobiles (200 million), windows (600 million) and outdoor cats (2.4 billion)**. In addition to new regulations that **site wind farms more carefully both on land and offshore**, a new technology funded by the U.S. Dept. of Energy is being tested on wind farms in Oregon, California, and Washington that **uses cameras to identify birds and an "audible deterrent" to divert them**. As more wind turbines sprout, the challenge is to **ensure that this clean and renewable energy is harvested carefully**.