SERMON2/25. FACT CHECKS

(1) BEE SPECIES

- In the winter of 2015-16 there was a species (bees) lost of 28.1%.
- Bees are pollinators for about 1/3 of the plants that we eat.
- In the last half decade 30% of the national bee population has disappeared.
- They are really vulnerable to "sub-lethal stressors". Factors that don't necessarily kill them but hamper their behavior like: Diesel fumes, neonicotinoid pesticides*, climate change and pesticides.
- According to the EPA the biggest cause is the parasite called Varroa Destructor, which is resistant to insecticides.
- In 1987, Monsanto, Dow, Bayer, and other chemical manufactures started selling genetically modified insecticides and herbicides that hurt bees by destroying their intestinal walls, which exposes them to viruses.
- According to Greenpeace neonicotinoids is know to cause acute and chronic poisoning to the entire bee colony.

Information and sources

1. Simon Klein. PhD on bee cognition and behavior.
2. Andrew Barron professor in the Department of biological Science Macquarie University.
3. Lena Wilfert. Evolutionary Geneticist
4. https://www.globalresearch.ca/death-and-extinction-of-the-bees/5375684
5. http://guardianlv.com/2014/03/monsantos-pesticides-are-partly-responsible-for-the-collapse-of-the-bee/
6. http://www.abc.net.au/news/2017-05-08/colony-collapse-ten-years-after-crisis-what-is-happening-to-bees/8507408
7. https://motherboard.vice.com/en_us/article/ypwq8k/colony-collapse-disorder-is-spreading-to-wild-bees
8. Lena Wilfert Study Research: http://onlinelibrary.wiley.com/doi/10.1111/1365-2664.12385/full

(2) MONARCH BUTTERFLY

- Monarch Butterfly population has declined in North America in the last 20 years.
- They are highly dependent on milkweed, which they look for in agricultural fields.
- The University of Minnesota conducted research that determined that neonicotinoids (pesticides), are extremely harmful to insects and other antrophods.

- The USDA also concluded that neonicotinoids are negatively affecting the larval monarch population.
- The offered solution is to treat crop seeds before planting them so that they grow away from pests without release the chemicals.

Information and Sources

1. https://monarchjointventure.org/threats/pesticides/
2. https://www.independentsciencenews.org/news/new-research-links-neonicotinoid-pesticides-to-monarch-butterfly-declines/

(3) ENBRIDGE SPILL

- Kalamazoo River oil Spill also called "The Dilbit Disaster" took place in July 26, 2010 in Calhoun County.
- It spilled approximately 1 million gallons in about 25-35 miles due to a six and a half foot tear in Line 6B.
- This line was carrying Bitumen, which is thicker than normal oil and more corrosive.
- Line 6B was built in 1969 and is 293 miles long; it connects with pipeline 5, 17 and 6A.
- In 2016 the EPA released the final desk report on the executed cleaning jobs by Enbridge.

Information and sources

1. https://www.epa.gov/enbridge-spill-michigan/enbridge-spill-response-timeline
2. https://insideclimatenews.org/news/20120626/dilbit-diluted-bitumen-enbridge-kalamazoo-river-marshall-michigan-oil-spill-6b-pipeline-epa

(4) EXXON

- According to a Harvard University Research Study by Geoffrey Supran and Naomi Oreskes, Exxon has been aware of climate change for 77 years.
- The study demonstrates that Exxon's research department discovered that climate change is real and is human caused yet 81% of their advertising from 1989-2004 expresses doubt.
- According to Greenpeace, Exxon has spent $30 million on think tanks that promote climate denial.
- Exxon's tactic of misleading the topic of climate change prevented countries like the US, China and India from signing the Kyoto protocol in 1998.

Information and sources:

1. https://www.cnbc.com/2017/08/23/exxon-mobil-misled-the-public-on-climate-change-harvard-study-finds.html
2. https://insideclimatenews.org/content/Exxon-The-Road-Not-Taken
3. https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40-years-ago/
4. Research paper: http://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf

(5) MEDICAL WASTE

- State environmental and health departments regulate medical waste. The EPA is not responsible for any of it.
- There was a Medical Waste Tracking Act in 1988 in which the EPA was forced to promulgate regulations on management of medical waste. The treaty expired in 1991.
- There is an EPA document with the guidelines for medical waste management that the states have access to.

Information and sources

1. http://www.michigan.gov/deq/0,4561,7-135-3312_9280---,00.html
2. Access to guidelines document: https://www.epa.gov/rcra/model-guidelines-state-medical-waste-management
3. https://www.epa.gov/rcra/medical-waste

(6) NUCLEAR WASTE & ENVIRONMENTAL RACISM

- Native tribes across the American West have been and continue to be subjected to significant amounts of radioactive and otherwise hazardous waste as a result of living near nuclear test sites, uranium mines, power plants and toxic waste dumps.
  And in some cases tribes are actually hosting hazardous waste on their sovereign reservations—which are not subject to the same environmental and health standards as U.S. land—in order to generate revenues. Native American advocates argue that siting such waste on or near reservations is an "environmental justice" problem, given that twice as many Native families live below the poverty line than other sectors of U.S. society and often have few if any options for generating income.
  "In the quest to dispose of nuclear waste, the government and private companies have disregarded and broken treaties, blurred the definition of Native American sovereignty, and directly engaged in a form of economic racism akin to bribery," says Bayley Lopez of the Nuclear Age Peace Foundation. He cites example after example of the government and private companies taking advantage of the

"overwhelming poverty on native reservations by offering them millions of dollars to host nuclear waste storage sites."

- Yucca Mountain and surrounding lands were central in the lives of the Western Shoshone and Southern Paiute peoples, who shared them for religious ceremonies, resource uses, and social events; Yucca Mountain continues to be considered sacred by the Shoshone people living today.
- Native American reservations are not subject to the same strict environmental laws as other US lands. So in 1987 in Utah, NV and AZ nuclear waste sites popped up. Where? On Native Amer reservations.
- "From our perspective the processes employed by the DOE is environmental racism designed to systematically dismantle the living 'lifeways' of the Western Shoshone people in relation to our land," said Western Shoshone member Ian Zabarte, a board member of the Native Community Action Council, according to the *Las Vegas Review-Journal*. The organization is authorized to give testimony during the licensing proceedings, the newspaper said.
- It's not about the amount of radioactivity that would permeate the groundwater, the Western Shoshone said. The environmental racism lies in the very notion that it would be okay to put any radioactive material there at all."

Information and Sources

1. Scientific American, Honor the Earth, www.honorearth.org
2. Jump up "Environmental Justice Case Study: The Yucca Mountain High-Level Nuclear Waste Repository and the Western Shoshone". University of Michigan.
3. Catherine S. Fowler; Maribeth Hamby; Elmer Rusco; Mary Rusco (October 1991). "Native Americans and Yucca Mountain" (PDF). *Cultural Resource Consultants, Ltd.* State of Nevada Agency for Nuclear Projects.
4. https://indiancountrymedianetwork.com/news/environment/environmental-racism-behind-plan-to-store-nuke-waste-under-yucca-mountain-tribes/

(7) KEYSTONE XL

- "Today, we take one more step towards putting the jobs, wages and economic security of American citizens first," the president said. TransCanada (TRP) CEO Russell Girling, standing next to Trump, said Keystone XL will "create thousands of jobs." The construction of the pipeline would indeed create thousands of jobs.
- Trump had said 28,000 jobs would be created.

Information and Sources

1. Keystone XL pipeline would only create 35 permanent jobs - Mar. 24 ...

2. money.cnn.com/2017/03/24/investing/keystone-pipeline-jobs-trump/index.html

(8) RENEWABLES

- Electricity produced by rooftop panels on big box stores and shopping centers could offset the annual electricity use of these buildings by 42%, saving these businesses $8.2 billion annually on their electricity bills.

Information and Sources

1. https://cleantechnica.com/2016/02/21/62000-mw-of-solar-power-capacity-possible-on-us-big-box-stores/

EXTRAS

Article by Jack Wellman
Jack Wellman is Pastor of the Mulvane Brethren church in Mulvane Kansas.

Sand County Almanac
Aldo Leopold, , p 147, Ballantine Books, New York, 1966.

Silent Spring
Carson, Rachel, Boston, p. 39 Mariner Books, 1962, 1990.

RE-TRAINING

- The Skilled Trades Training Fund Collaborates with other agencies in Michigan to train workers with the right skillset to succeed in the world today.
- The Department of Energy has trained more than 50,000 people to enter the solar industry, since 2009.
- After re-training technical workers would make more in the solar industry than in coal.
- In November 2015 the solar industry employed 208,859 workers.

Information and sources

1. http://www.michigan.gov/wda/0,5303,7-304-64365_64538-312972--,00.html
2. https://www.forbes.com/sites/johnhancock/2016/11/10/how-mining-oil-and-gas-workers-are-retraining-for-the-solar-economy/#f7dd40fcb9e3
3. https://hbr.org/2016/08/what-if-all-u-s-coal-workers-were-retrained-to-work-in-solar

Pope Francis, April 3, 2015, Time Magazine

A prayer for our earth

All-powerful God, you are present in the whole universe and in the smallest of your creatures.
You embrace with your tenderness all that exists.
Pour out upon us the power of your love,
that we may protect life and beauty.
Fill us with peace, that we may live
as brothers and sisters, harming no one.
O God of the poor,
help us to rescue the abandoned and forgotten of this earth, so precious in your eyes.
Bring healing to our lives,
that we may protect the world and not prey on it,
that we may sow beauty, not pollution and destruction. Touch the hearts of those who look only for gain
at the expense of the poor and the earth.
Teach us to discover the worth of each thing,
to be filled with awe and contemplation,
to recognize that we are profoundly united
with every creature
as we journey towards your infinite light.
We thank you for being with us each day.
Encourage us, we pray, in our struggle
for justice, love and peace.