

Every aspect of agriculture will be affected by climate change. Not just at some point within our lifetime, either; the impacts of climate change will be felt this year, or even this week!

This is a huge bummer for anyone interested in agriculture (or, say, a stable existence). But it's also really interesting. Weather is a series of complex systems, interacting in chaotic ways that are notoriously hard to model. Meteorologists, who work with good data and cutting-edge technology, often can't say for certain if it will rain tomorrow. Scaling that up to a global climate and then attempting to predict the localized impact will result in rapid changes in our understanding of the science of "what the heck is going on". Here are some things that we may see in Michigan this year, and some global trends to keep an eye on.

February's unusual warmth didn't hurt annual crops, other than giving some a nice little head start. On the other hand, fruit trees being ahead of schedule is bad news. A hard freeze after a certain growth point could mean the loss of a whole crop, but most are still doing okay. Low overnight temperatures have kept bud development in check, but that could change quickly.

Veggie Box

What's in the Box?

Organic Celeriac, Green Wagon Farm, Ada Organic Parsnips, Green Wagon Farm, Ada Parsley, Hunter Park GardenHouse, Lansing French Breakfast Radishes, Hunter Park GardenHouse, Lansing

Mini Bok Choy, Hunter Park GardenHouse, Lansing Pea Shoots, Blue Mitten Hydroponic Farms, Okemos Organic Salad Mix, Monroe Family Organics, Alma

Add-ons

Bread, Stone Circle Bakehouse, Holt
Meat Variety: Whole Chicken, Heffron Farms, Belding

Blueberries are most likely to be affected. The next thing farmers will be watching are the spring rains. One of the long-term climate change predictions for Michigan is more infrequent rainstorms, but with heavier rainfall. Flooded fields during spring planting season would cause delayed planting and late harvests, and damage crops already in the ground. Summer heat could be a challenge for farm labor. Dry summer conditions could be mitigated by irrigation, but irrigation increases cost. We may see increased pests and plant diseases, since a normal winter deep freeze helps limit the life cycles of insects and pathogens.

On a global scale, last year's El Niño (season of above-average temperature in the Pacific Ocean) likely contributed to our mild winter temps. After an El Niño, there sometimes is a La Niña season (below-average ocean temperatures). Current predications are about a 60% chance of a La Niña season. In the past, El Niño to La Niña flip-years in Michigan have had hot, dry summers, followed by colder than average winters. However, predictions are made more complicated by recent changes to global shipping. New emissions regulations reduced smog in shipping lanes so quickly and dramatically that ocean surface temperatures are now setting new record highs almost weekly, since that they don't have the "shade" the smog clouds provided! This is an example of how complex these systems are: better air quality in the Pacific might cause -- or perhaps mitigate? -- a Michigan drought.

Producer Spotlight Blue Mitten Hydroponic Farms

Blue Mitten Farms is an independently owned and operated, USDA GAP Certified farm located in Okemos. They provide area restaurants and markets with safe, sustainable, year-round hydroponic lettuce and microgreens. Hydroponics is the method of growing plants without soil in which the nutrients are specifically administered using mineral nutrient solutions in a constant flow of water. Coupling this modern farming technology with Blue Mitten's small but knowledgeable team of born-and-raised Michiganders, they have been improving their practices and providing artisan greens, microgreens, and herbs year-round, as well as seasonal offerings from their outdoor plots since December of 2016.

Crop Profile Celeriac

While you're probably familiar with its close cousin celery, this week's featured item is actually the root; celeriac! While it's green top may look similar to celery, they are actually not the same plant! Celeriac is a bit more uncommon here in the US, but has been enjoyed for centuries throughout Europe. Initially, celeriac was used for religious and medicinal purposes throughout ltaly, Greece, and Egypt. While the plant had been known of and used for so many years, it wasn't until 1623 that it was actually recorded as a food. That record brought a new popularity to celeriac, which was then widely cultivated throughout Europe by the end of the 1600s. Today, celeriac is great when paired with potatoes, used in stews, featured in a salad...actually there are a lot of great uses for celeriac! With a few more weeks left of winter weather, it's the perfect time to try out a nice and warm celeriac recipe (hint: look for it on the back page!). We hope you enjoy this unsung hero.

Recipes and Tips!

Breakfast Radish Toast

- 1 bunch of Veggie Box french breakfast radishes, washed with leaves and roots removed
- Butter
- Toasted baguette or bread slices
- Salt and pepper to taste

Use a mandoline or sharp knife to slice radishes into very thin slices.

Butter the toast, top with a layer of radishes slices, and season to taste with salt and pepper.

Variations: Instead of butter, use cream cheese, ricotta, cottage cheese, brie, yogurt, or a vegetable or nut-based spread. Garnish with herbs or microgreens, like your Veggie Box parsley or Veggie Box pea shoots.

Recipe adapted from thekitchenwhisperer.net



Fun Fact!



In Poland, McDonald's serves a version of the McMuffin topped with radish slices and twarożek (farmer's cottage cheese, traditionally used as a breakfast spread).



Broccoli, Potato, and Celeriac Soup

- 1 Veggie Box onion, finely chopped
- 2 Veggie Box garlic cloves, minced
- 1/3 cup of flour
- 2 cups of milk
- 2 cups chicken broth/stock
- 2 cups of water
- 1 tsp salt
- 1/2 tsp black pepper
- 3/4 lb of Veggie Box potatoes, peeled and cut into 1/2" cubes
- 3/4 lb of Veggie Box celeriac, peeled and cut into 1/2" cubes
- 5 cups of broccoli
- 1+ cups of grated cheese

Melt butter in large pot over medium high heat. Add onion & garlic, cook for 3 minutes or until onion softens. Add flour and mix into onion mixture. Cook for 30 seconds.

Next, pour in milk and whisk as it turns into thickish paste and mostly smooth.
Add chicken stock, water, salt and pepper. Stir, then add potato and celeriac.

Bring to simmer, then reduce heat to a gentle simmer. Stirring occasionally, cook for 8 minutes (no lid) or until potato and celeriac is almost cooked.

Add broccoli and stir. Cook for 2 minutes (or until broccoli is cooked to your liking), then take the pot off the stove.

Lastly, stir in cheese and add more salt and pepper to taste.

(Optional) Add bacon, more cheese, green onions, or chives as garnish.

Recipe adapted from recipetineats.com