

From: Sherri Lange [<mailto:kodaisl@rogers.com>]

Sent: Monday, November 6, 2017 2:05 PM

To: Krawczyk Joseph W CIV USARMY CELRB (US) <joseph.w.krawczyk@usace.army.mil>; Puco
ContactOPSB <contactopsb@puco.ohio.gov>

Cc: Liz Hartman <liz.hartman@ee.doe.gov>

Subject: additional lost material and thank you! please add to comments for FILES : (USACE) Project
Number 2010-00223, (OPSB) Icebreaker 16-1871-EL-BGN

Dear Joe and Matt,

Kindly add this material to comments as per the file numbers in the subject line.

So much of our comments and informational materials submitted got lost in the "translation" to new file number for the LEEDCo project, as many have now noted.

We are very grateful, Mr. Krawczyk, for the extension of time to recover some of those. All of the comments and more that have not yet been sent, over 60 that I know of, are extremely relevant to omissions and errors and misrepresentations presented to you in the Draft EA.

Best wishes,

Sherri

Sherri Lange

CEO, NA-PAW, North American Platform Against Wind Power

*416-567-5115***Error! Filename not specified.**

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www.na-paw.org

Additional submission to Mr. Joe Krawczyk USACE, and Mr. Matt Butler, OPSB

**LEEDCo File numbers: (USACE) Project Number 2010-00223, (OPSB)
Icebreaker 16-1871-EL-BGN**

Thanks to Tom Wasilewski for reminding us of the Monarch migration.

The shores of Lake Erie are abundant with Butterfly migration, yes across the lake.

Letter originally submitted we believe by Mr. Wasilewski in 201. Likely the material was as many comments, expunged or lost when the file numbers changed.

Monarch Watch estimates that "development (subdivisions, factories, shopping centers, etc.) in the U.S. is consuming habitats for monarchs and other wildlife at a rate of 6,000 acres per day— that's 2.2 million acres each year, the area of Delaware and Rhode Island combined!"

One of the many things we don't know is what impact wind turbines have on migrating monarchs.

On Mon, Oct 17, 2011 at 4:03 PM, <Tomwasilewski@aol.com> wrote:

Fyi

Letter by Ripley (NY) Hawk Watch pioneer Len DeFrancisco about the wind turbines proposed for Chautauqua County-published in the Jamestown (NY) Post Journal on 16 Oct 11. Len is writing about the proposed turnpike WTs---there are at least six industrial WT projects in the works for Chautauqua County.

<http://www.wind-watch.org/news/2011/10/16/thruway-authority-doesnt-ask-for-opinion/>

filed: October 16, 2011 • [Letters](#), [New York](#)

Thruway Authority doesn't ask for opinion

Credit: The Post-Journal, post-journal.com 16 October 2011 ~~

The Post-Journal's Sept. 16 story on "Wind Turbines Coming to Local Stretch of the Thruway" was a shocker to many folks in Chautauqua County and Western New York. Since the spring of 2002, Ripley Hawk Watch (RHW) members and the Chautauqua County Citizens for Responsible Wind Power (CCCRWP) have opposed putting wind turbines in the migration flyway. Since the last Ice Age, birds, bats, butterflies and bugs have flown in this well-known migration flyway going northward in the spring and southward in the fall. Now the Thruway Authority (TA) plans to put four wind turbines in Chautauqua County and one in Erie County. Four turbines will be 202 feet from the blade tip at apex to the ground. The fifth turbine height is unknown as is the exact cost. The TA is budgeting \$4.8 million but construction costs are not known now.

When asked about possible opposition the spokesperson said simply "that they have a plan and intend to begin moving forward." That's like giving us the finger – in the eye. No one called us to get our views and input.

Since 1990 I've helped in the spring migration, counting thousands of raptors. But the greatest number of birds are the nocturnal flyers using this migration flyway. Experts say that "15 to 40 million birds use this flyway." Birds use the wooded areas to rest and eat during spring and fall migration. The New York DEC and the United States Fish and Wildlife Services have expressed deep concerns about putting wind turbines in the migration flyway along and south of the Lake Erie shoreline.

Will the TA have Rada Bird Studies done to cover these sites? Will they secure permits to killing Golden and Bald Eagles? Have the people of Western New York lost their rights to present their views? In the past, the NYDEC and the USFWS asked us to submit our views to help them setting proper guidelines on wind turbine placement, concerning birds, bats, butterflies and bugs. At our own expense we went to Albany to meet with the NYDEC and USFWS officials on the Wind Energy proposals coming into Chautauqua County and New York State. It's sad that the TA in Albany never heard of the Ripley Hawk Watch and the Concerned Citizens group. We don't consider it a win-win; to us it's more like a kill-kill and injure our flying wildlife. Really very sad.

Keep them flying and singing!

Len DeFrancisco

Falconer

NEWSFLASH

<http://mexiconewsdaily.com/news/ive-never-in-my-life-seen-anything-like-it/>

‘I’ve never in my life seen anything like it’

Huge numbers of monarch butterflies stop for the night in Cleveland, Ohio

1653

Mexico News Daily | Tuesday, September 15, 2015

Monarch butterflies “in the thousands” were flying over Lake Erie on the weekend, later **landing to overnight in Wendy Park in Cleveland, Ohio**, in numbers that haven’t been seen in years.

“I’ve never in my life seen anything like this,” said one of many visitors who turned up at the park to witness the butterflies’ arrival.

Charles Hawker said he had never seen so many before in his life. “At the beginning of the summer, I saw two or three at different times in different places. Never, you know, four or five thousand in a group. Never.”

Millions of monarchs make the annual migration from Canada and the U.S. to the forests of Michoacán and the State of México, where they overwinter. The numbers have been in decline for several years, the result of loss of habitat in Mexico and milkweed, their main source of food, in the U.S., say experts.

The migration was up 69% last year, **but the number was still the second-lowest in 21 years.**

NOTES ABOUT BUTTERFLY MIGRATION LAKE ERIE

<http://www.canadacool.com/location/monarch-butterflies-point-pelee/>

On a major migration route – 10,000 monarch butterflies have landed on Point Pelee in a single day

[Coolest Wildlife](#), [Ontario Cool Facts](#), [Parks Canada Cool Facts](#)
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Point Pelee Butterflies © Lucy Izon

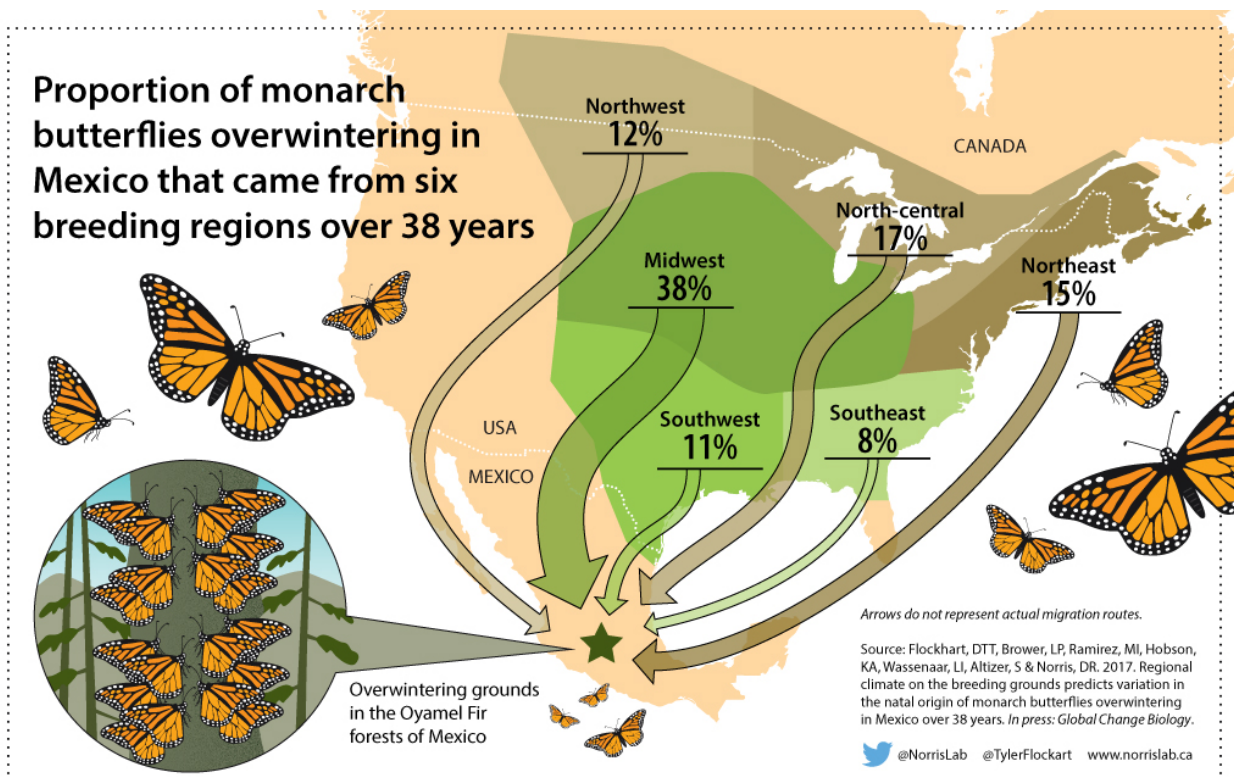
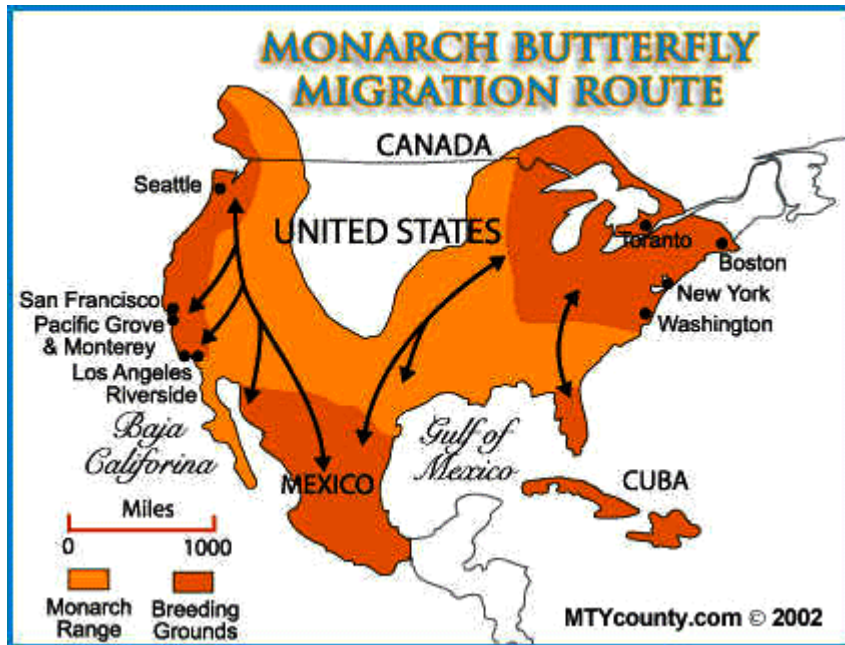
Point Pelee, Ontario – Point Pelee is one of Canada's smallest national parks, but it attracts more than 400,000 visitors each year, primarily because it's a world-famous location for viewing birds and monarch butterfly migrations. The finger-shaped peninsula of land reaches out into Lake Erie, becoming the southern most point on the Canadian mainland. It's actually on the same latitude as northern California.

Point Pelee is known for attracting over 380 species of birds including many songbirds. The real show is when monarchs gather here between August and October, because it's the shortest crossing point over Lake Erie during their 3000 km journey to their winter home in the mountains of central Mexico.

Arrive on the right day and you may see them by the thousands. There's even a butterfly hotline you can call to see if it's a good time for viewing them: (519) 322-2371, or watch updates on Twitter:

@[pointpeleenp](#)







Monarch Butterfly
Pre-Migration & Migration
[map](#) | [list](#) | [home](#)



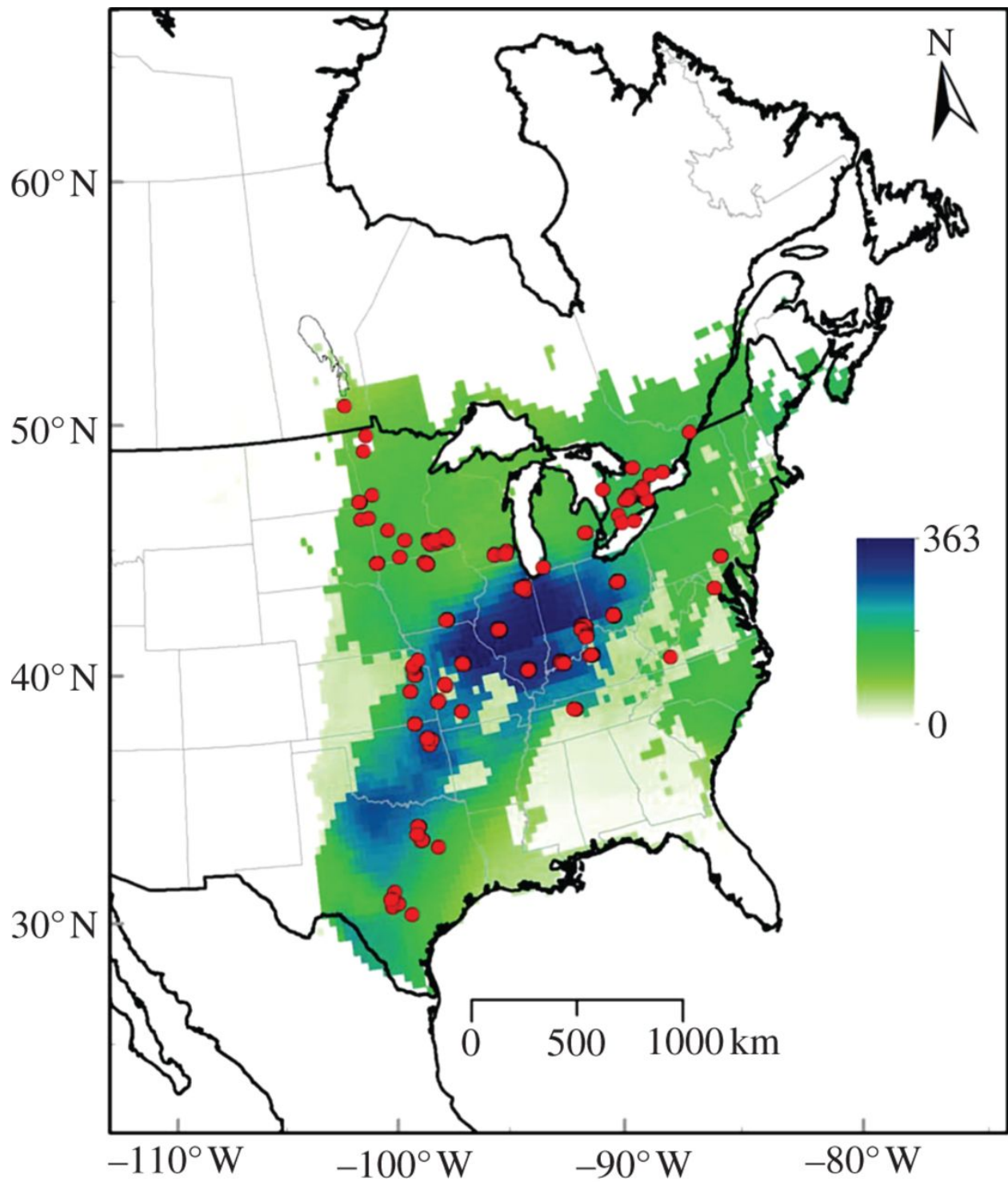
Monarch Butterfly
PEAK Migration
[map](#) | [list](#) | [home](#)



Monarch Butterfly
Overnight Roosts
[map](#) | [list](#) | [archives](#) | [home](#)



Monarch
Egg or Larva
[map](#) | [list](#) | [home](#)



Please note the red dot breeding areas abundant around Lake Erie and Ontario.

http://lakeerieislandswildlife.com/?page_id=366

<http://monarchwatch.org/blog/2015/10/14/monarchs-over-lake-erie-waters-citizen-scientist-observations/>

Through our documentation and the reports of other citizen scientists, we have found evidence that monarchs do cross Lake Erie, and they do so deliberately and successfully.

While scientists are aware that monarchs can cross water, it is not well understood how monarchs cross the lake and under what conditions they will do so. Specific observations are few. Physical conditions such as wind direction, wind speed and temperature during these transits are not well understood. Reports from citizen scientists can serve to increase our understanding of the monarch migration over bodies of water. This article will share the stories of citizen scientists throughout the Great Lakes region, highlighting reports primarily from observers in Lake Erie and Lake Ontario, but also a few reports from Lake Michigan.

Why do monarchs cross the Great Lakes?

There is some explanation for this, particularly as it relates to Lake Erie. Dr. Chip Taylor has provided an explanation of monarch movements through southern Ontario, along the north shore of Lake Erie. Dr. Taylor explains, "During the fall migration in southern Ontario, Monarchs cluster together on trees to form overnight roosts in a manner similar to the dense aggregations formed at the overwintering sites. Overnight roosts may contain a few hundred to several thousand individuals, and monarchs usually form clusters in the same areas year after year. The location of overnight roosts is largely determined by topography, and proximity to abandoned farmlands with abundant nectar resources such as fall composites (asters and goldenrods). Monarchs migrating south in the fall through southern Ontario build up in numbers along the north shores of Lake Ontario and Lake Erie. Their apparent reluctance to fly over large bodies of water, coupled with the desire to continue moving southwards, probably causes the butterflies to fly southwestward following the shoreline. This inevitably results in large concentrations of monarchs accumulating on peninsulas jutting out into the lakes, where they have little choice but to eventually proceed southward over open water. Large aggregations and overnight roosts occur at many locations on peninsulas and at other locations along the lakeshores, including Presqu'île Provincial Park, Long Point, Rondeau Provincial Park and Point Pelee National Park." (www.monarchwatch.org/read/articles/canmon2.htm)

One of the main stopover sites for monarchs migrating along the northern Lake Erie shoreline is Point Pelee, located in Leamington, Ontario, Canada. Each fall, naturalists and observers at Point Pelee National Park report hundreds or thousands of monarchs gathering at the tip of the peninsula, awaiting favorable weather and a good tailwind that will enable them to cross the lake safely. Most often, monarchs gather at the tip ahead of a storm or cold front, or during times when winds from the south create a significant headwind. Monarchs will remain at the tip and nectar as they wait for favorable air temperatures and calmer, more northerly winds. Once the weather is suitable, they will continue their migration across the lake.

Observers have reported the behavior of monarchs as they fly out over the lake. Citizen scientist Darlene Burgess frequently observes monarchs roosting at Point Pelee National Park. Burgess has reported roosts of 4000-5000 monarchs at the tip of the peninsula. She has noticed that northerly winds tend to facilitate the migration, whereas strong southerly winds and storm fronts will cause monarchs to gather at the tip. Burgess shared this observation, "On Saturday, September 19, 2015, a strong storm moved into the area. Winds were from the southwest at 16-18mph with gusts of 23-35mph. Over 5,000 monarchs roosted at the tip. The next morning, winds were from the north at 9 mph. As the sun rose, monarchs roosting on the east side of the trees began basking, and quickly began to disperse. Most were dispersed by 7:45 am. The three largest roosts broke up by 8:30am. The monarchs flew to the shoreline trees, and then began flying out over the water in groups of 6-8 individuals, initially about 60 feet over the water. They appeared to be testing the wind and their strength. Some would fly back to the trees, but the majority continued on. As they continued south over the lake, they flew even higher, up to 100 feet. I was able to watch them for some distance with my star-gazing binoculars. They continued on, flying due south, at a height of about 60-100 feet above water. This continued on until about 12:30pm, when all monarchs were gone from the tip." She further reports, "I observed on another day with a strong southeasterly wind that the monarchs were leaving low from the shoreline. They were again flying out in groups of 6-8, testing the winds. Most returned to shoreline trees, with only a few continuing on each time. That's the day I painfully watched two monarchs fly south about a foot over the 1-foot waves...I was so concerned the waves would hit them. I did observe them attempt a higher altitude of 10-15 feet, but not for more than a second or two before returning to their low flight and flying out of view."

Beall, in 1941, reported his observations of monarchs leaving the shoreline. He noted that "monarchs starting out over the lakes from the shore, flew either with or against the wind." He felt there was no marked tendency for monarchs to move either with or into the wind, and thus concluded that

monarchs were not simply being pushed around and dispersed passively but were instead flying with deliberate purpose. He enlisted the aid of the Southey Shoals lighthouse keeper to document monarch movements over Lake Erie from 1937-1938. The lighthouse is located 7 miles off Point Pelee. The keeper recorded flight direction for monarchs passing by the lighthouse, and data showed a preponderance of monarch flight to the south, with some lesser movement to the southeast (Beall, 1941).

Can monarchs cross Lake Erie successfully?

Directly south of Point Pelee are the Lake Erie Islands, located in the western basin of Lake Erie. My colleagues—naturalists Jackie Taylor of the Lake Erie Islands Nature and Wildlife Center (LEINWC), and Nicole King of the Ohio State University's Stone Laboratory—and I have been actively documenting the monarchs that migrate through the Lake Erie islands since 2011. I have assisted with tagging efforts and worked to locate and photograph fall roosts. Taylor and King have tagged dozens of monarchs at the South Bass Island lighthouse grounds, while also monitoring monarch migratory and reproductive behavior on South Bass Island and the surrounding islands. Taylor and King have documented monarchs reproducing on South Bass Island and Gibraltar Island, and Taylor has observed monarchs reproducing and migrating through Pelee Island, North Bass Island and Middle Bass Island. Taylor, along with Katie Hollenbeck of Stone Laboratory, carried out a tagging effort during September 24-25, 2012. During that 2-day period, winds were 8mph from the southwest, and Taylor and Hollenbeck tagged a total of 236 monarchs that resulted in three recoveries of tagged monarchs at El Rosario. These recoveries provide evidence that monarchs can cross Lake Erie from South Bass Island to the OH shoreline, a distance of three miles, and continue to migrate to Mexico successfully. In addition, I documented 400 monarchs roosting on South Bass Island on September 13, 2014 and again documented a roost of 400 monarchs that formed on the island the evening of September 12, 2015. Clearly, these monarchs were not produced on South Bass Island, strongly suggesting a more northerly, off-island origin. Miller Ferry services the Lake Erie islands, and captains and deckhands report annual observations of monarchs flying over the water toward the OH shoreline, usually at 20-30 feet above the water. Captain Glenn Cooper states, "I usually see 2 or 3 a day during the fall. They fly at the level of the pilot house," a height of about 25 feet off the water.

<https://www.wcaudubon.org/cleveland-lakefront-nature-preserve.html>

http://www.cleveland.com/insideout/index.ssf/2016/09/monarch_migration_2016.html

CLEVELAND, Ohio -- Be on the lookout for monarch butterflies flitting through your backyard or feeding in your pollinator garden. The insects are at the tail end of the monarch migration, which begins in Canada and ends in Mexico, where they spend the winter.

Peak monarch migration was in mid-September, said Gayle Albers, watershed stewardship center manager for the Cleveland Metroparks, and probably will end around the first week in October.

After crossing Lake Erie, monarchs find resting and feeding grounds in Northeast Ohio. The Cleveland Lakefront Nature Preserve, just off of downtown Cleveland, is an important resting spot for migrating monarchs coming over Lake Erie.

The monarch population is declining due to increased use of herbicides that kill milkweed, which is the only plant on which monarchs lay their eggs and is monarch caterpillars' sole food source. Loss of habitat also has affected monarchs, Albers said. She recently led a public hike to see monarchs at the Lakefront Nature Preserve.

Little detail regarding typical butterfly flight altitudes is known. Monarch butterfly migration is well studied, and this species has been recorded to fly between 2 meters and 3,350 meters above ground elevation. These flight patterns would bring the butterflies within the blade heights of wind turbines. Similarly, several butterfly species are known to follow shorelines during migration, but other landscape features and their relationships to flight patterns are less well known.

<https://www.learner.org/jnorth/tm/monarch/HeightFallFlight.html>

- butterflies are recorded flying at 11,000 feet. LEEDCo's proposed turbines are to be about 450 feet tall. There is no question that butterflies will be impacted, and other flying insects as well.

How High do Monarch Butterflies Fly During Fall Migration?

Contributed by Dr. Bill Calvert

Q. What's the highest you've ever known monarchs to fly?

A. Glider pilots have reported monarchs flying as high as **eleven thousand feet.**

Q. Why do they fly at such high altitudes?

A. At increasingly higher altitudes wind speed increases rapidly. So if the winds are going in the right direction, it pays monarchs to thermal upward.

Q. Why don't monarchs always fly that high?

A. The height monarchs fly depends on which way the wind is blowing. When winds are from the south, monarchs fly very low. Or, if the winds are strong enough, they don't fly at all. They wait patiently in low areas with lots of trees (if available) for the winds to turn around. During these times, they mysteriously accumulate. This is when they form their gigantic roosts and people are dazzled by large curtains of hanging butterflies at night and early morning.

When the winds turn around the story is very different. During a typical morning with correct winds, monarchs will burst out of their roosts after they have warmed themselves enough to fly. Remember they are cold blooded creatures (poikilotherms in scientific lingo) and must depend on sunlight (radiation) to warm their flight muscles. Once they leave the roost they may fly to a point in full sun where they bask some more or they may search for a morning thermal, and ride the rising air upward, twisting and turning like a feather caught in the wind.

How do butterflies fly so fast?

Certainly, some fast-flying skippers can fly 30 miles per hour or faster. Slow flying butterflies probably fly **five miles per hour** or a little faster. **During fall migration, migrating Monarchs (Danaus plexippus) have been seen flying by tall buildings such as the Empire State Building at more than 1,000+ feet.**

<https://ontario-wind-resistance.org/2011/03/25/monarchs-fate-up-in-the-air/>

LAKE ERIE – The struggling monarch butterfly faces potential disaster if the Ontario government's moratorium on offshore wind turbines is ever lifted and a proposed wind farm for the middle of Lake Erie — right in the butterfly's migration path — goes ahead, biologists warn.

"I'm really concerned about butterflies. They don't fly that high," said Scott Petrie, executive director of Long Point Waterfowl, a non-governmental body studying the impact the turbines would have on water birds in the area. (Our comment: we actually know they fly up to 3,000 feet....but the complexity and general patterns are yet unknown, unmapped.)

The monarch's numbers have been falling in the past few years. BSC carries out counts of the butterfly, which has been declared a "species of concern" in Canada, at its station at the tip of Long Point every fall and has found its numbers to have dropped dramatically in the past three to four years.

In 2010, the butterfly's winter numbers in Mexico dropped to a record low. This winter's numbers have improved: they've doubled from last year but are still only slightly more than half the long-term average.

Another concern, said Petri, are the low-pressure air pockets created around the swirling blades of the turbines that cause bats' lungs to implode, instantly killing them.

Nobody knows how butterflies will react to the pockets if they fly into them, he said.

McCracken noted the low-pressure effect is newly discovered. "It's something nobody predicted."

The wind farm off Long Point combined with other projects proposed for the American side would form a wall of turbines that would be hazardous not only to butterflies but also bats and birds migrating to and from the Long Point area, Petrie added.

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in

Case No(s). 16-1871-EL-BGN

Summary: Public Comment electronically filed by Docketing Staff on behalf of Docketing