

In the Abstract

Inspired by the Research Bibliography of the University of Michigan Biological Station, Pellston MI

To think that yesterday
I didn't know that half a dozen sand spits
on the mitten's tip of Michigan
are oriented with their spines aligned,
all trending to the west/northwest
suggesting that prevailing winds
came from the east-southeast 11,000 years ago—
wind that raced in summer
over Glacial Lake Algonquin,
gaining power in the stretch across
an estimated fetch of two hundred fifty miles

To think that yesterday I passed the hours unaware
that all the while the likelihood of male cicadas singing
was increasing with the brightness of the sky;
not knowing that the females listening in through their tympana
would more likely move toward males
who nailed the high notes, with peak frequencies of 9 kHz
rather than 5—not really a surprise—
But if I'd known there was a word so apt
to describe that act of navigating toward a sound,
I could have said "*Nice phonotaxis*"
as I dropped my son at practice
and he moved toward the metal 'ping' of baseball bats
from fields beyond the trees

To think that yesterday, if asked, I would have guessed
that double-crested cormorants had taken more than 6.3%
of yellow perch in '95 around the isles of Les Cheneaux,
if only on the basis of their ever-present,
wheeling show of iridescent wings
Yet at the same time, I'd have been among the last
to cast *Emblemesoma auditrix* as cannibals in utero—
having always been inclined
to see the better side of parasitic flies (all politics aside)

To think that only yesterday my
daughter and I walked the dog, and finding
milkweed blooming in the roadsides,
talked of monarchs when we might
have talked of microsatellite loci—
tried the patience of our collie while envisioning
short sequences of DNA repeated in tandem arrays,

tracing the fine genetic lines of kinship and identity
Had we known, we might have cancelled all our plans to
spend the afternoon exploring milkweed inner space;
found some shade and lingered there to savor the unseen,
to feel the weight of awe
no less than that of gravity

What is insight, if not minutia well considered,
and what are we, if not expressions of the same
profound complexity that science would elucidate:
bound up with the sensory biases of crayfish,
the breeding site fidelity of piping plovers,
the respiratory exhalations of carbon dioxide
from downed wood on the forest floor?

Such a paradox, to think that yesterday I felt the wiser, knowing less,
the world a simpler place for having not perused
a hundred years of research laid like fieldstone fence
around the bend and out of sight; and really,
how much better would I sleep
could I not contemplate small mammal species
shifting long-established territories as the climate warms?
Still, though this is Michigan, I cannot cherry pick, and
I'd not miss the chance to celebrate a decade-long decline
of methylmercury in fish off Isle Royale, and better yet,
to know the reason why, for I see my children's lives
between the axes of the graphs,
and despite my all-time favorite Wendell Berry line,
"Be joyful though you have considered all the facts,"
I'll throw my lot with those who orient like
sand spits to the wind, in hopes one day
the facts themselves
are cause enough for joy.

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Wendell Berry, from "*Manifesto: The Mad Farmer's Liberation Front*" (1973)

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