

Fall 1975

# The March ice storm: disaster and opportunity

Paul Matthiae

*University of Wisconsin - Milwaukee*

Philip B. Whitford

Follow this and additional works at: [https://dc.uwm.edu/fieldstation\\_bulletins](https://dc.uwm.edu/fieldstation_bulletins)



Part of the [Forest Biology Commons](#), and the [Zoology Commons](#)

---

## Recommended Citation

Matthiae, P.E. and P.B. Whitford. 1975. The March ice storm: disaster and opportunity. *Field Station Bulletin* 8(2): 1-2.

This Article is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in *Field Station Bulletins* by an authorized administrator of UWM Digital Commons. For more information, please contact [open-access@uwm.edu](mailto:open-access@uwm.edu).

# THE UNIVERSITY OF WISCONSIN—MILWAUKEE

## FIELD STATIONS BULLETIN



---

Vol. 8, No. 2

Milwaukee, Wisconsin

Fall, 1975

---

### THE MARCH ICE STORM: DISASTER AND OPPORTUNITY

The ice storm of March 1-5, 1976, of perhaps once in a century severity, hit the UWM Field Station with ice loads up to 2 in. thick. Electricity was out for 9 days, creating a real emergency until the Staff could get generators for essential power needs, such as laboratory freezers, water pump, limited heating, etc. For some days there was no time for getting into the woods and swamps because of the problems in the lab and other buildings.

The crowns of many trees, especially older beech and maple, were literally torn asunder by the sheer weight. In the swamp forest most tamaracks had their tops snapped off. The beech-maple forest of course was one of the Nature Conservancy's first major projects in Wisconsin, one of the jewels of the Scientific Areas System, and fortunately one of the most thoroughly studied tracts in the state. We had excellent pre-storm data on the forest composition and nesting bird populations, small mammal utilization, studies on biomass, water and mineral flows, corticolous lichens, etc.

Preliminary estimates within a few days of the storm showed probably 50% of the former tree canopy on the ground, which certainly will result in drastic changes in the ecosystem as a whole. We have initiated a thorough inventory of the damage in both upland and swamp forests, recording breakage by species and size class, etc. We propose to follow up on as many aspects of the aftermath as we can get the manpower for, over a period of at least a decade. We expect that the understory seedlings and saplings will fill in rapidly due to the increased light, and that many other changes will be evident in early years. Some

of the effects may persist for fifty years or more. After our initial disbelief and shock at the appalling force of nature, we realized that this is a once-in-a-life-time opportunity for major research into one of Nature's grand experiments.

There should be opportunities for a number of individual and team research projects, M.S. or even Ph.D. theses, in the next few years. We should get good data on species, size classes and biomass of fallen branches this spring. The scope of the damage makes it imperative that someone should study fungal succession and breakdown rates; probably there will be an unusually high biomass and variety of fleshy fungi in a few years. Nic Kobriger's lysimeter study is being reactivated and should be followed by graduate students for a number of years to determine the natural release rate of the nutrient load in the downed timber. Seedlings, saplings, shrubs and herbaceous vegetation and lichens should be studied intensively in the next five years or so to follow the response to increased light. Unfortunately we have very limited pre-storm data on invertebrates, but populations of many species will undoubtedly change rapidly over the next 5-10 years and should be closely followed. Bird and mammal populations, too, will be monitored carefully. There has, so far as we know, never been a thorough study of ecosystem changes and responses to damage from ice in a forest where pre-storm information for comparison was as extensive as ours. The logistics are complex however, requiring much time, and energy by staff, students and volunteers to carry out coordinated efforts.

Meanwhile, of course, we do not plan to remove fallen trees or branches, except as necessary to restore the main access trails. For the rest we will watch and learn from Nature's restoration processes.

Paul Matthiae  
*Field Station*  
and  
Philip B. Whitford  
*Department of Botany*