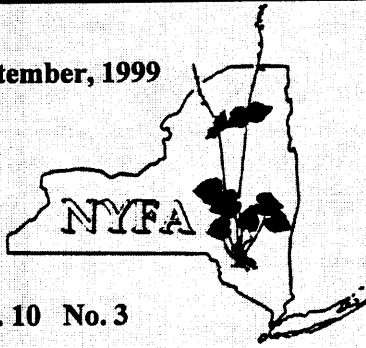


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New York Flora Association
of the New York State Museum Associates

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Special Botanical Soul-searching Issue

Letters to the Editor:

O.K., I asked for it, with my diatribe on loosestrife. I actually like to get shot down when it is done as eloquently as in the following letter.

Dear Dr. Mitchell:

Please tell me something good about mugwort.¹ For the last four years I have been working, essentially alone, in Gerritsen Creek, trying to eradicate a big monoculture of mugwort, and replace it with native grasses and wild flowers. I pull mugwort out by hand and dig up the roots with a shovel. Does this help propagate the mugwort? In its place I have planted about a dozen species of native prairie and meadow grasses and more than 30 species of wildflowers (some are naturalized citizens, I admit). I thought I was helping to promote biodiversity, which you made me believe was a good thing.

So far I have been able to restore an area about the size of a football field. This seems to be not much of a result for four years work. I consider my experiment to be a failure. No one else cares about it, or is willing to help, with very few exceptions. [...] When I ask them to help, they always have a good reason not to.

The professional "environmentalists" are no help either. They just want to do research and write articles. The bird watchers want to add birds to their list to brag about. The flower-watchers, butterfly-watchers and insect-watchers trample all over the grass and flowers trying to identify things. None of these people would give an hour of their time or a dollar of their money to actually *do* something for the wildlife. They just want to use it to promote themselves in one way or another. There are no rare plants there, so your contingent has no interest in it either.

¹*Artemisia vulgaris* L.

The experiment failed. From where I stand, it looks like the environment has no future in America. I got tired and depressed and sick, so I couldn't work this summer. So, you see, what I need is a top-level, important, leadership person like yourself to make it official. Say that mugwort is just as good as native grasses and flowers, and that Gerritsen Creek garbage dump [...] should not be touched by meddlers like me (the position of the Parks Department). Then, I can just quit and walk away with a clear conscience, and go spend my time making money like everyone else.

Yours truly, Harvey Stoneburner, Brooklyn, NY

Editors Reply:

Dear Mr. Stoneburner,

Your wonderfully poignant letter struck at the very heart of the modern conservation dilemma, and also put a lot of us in our place. Thanks. We needed that!

Also, the feelings of failure you express about your project hit me very close to home. Please know that many of us share your pangs of helplessness in the face of the current onslaught of habitat destruction occurring worldwide.

If I may, I'd like to answer your letter with a series of points, some of which are my own beliefs, some apologies, and some statements of intent or possibility: **✘ I believe the whole concept of "habitat restoration" is based on a false premise.** Once an ecosystem has been altered, you can only alter it further. There is no "going back," nor should there be. For instance, those who pick up pieces of the prairie like throw-rugs, stack them, go about their strip-mining, then replace the prairie squares, are not "restoring" the prairie. Most of the native plant species do survive, but the future of that habitat has been altered permanently. As an example, the soil microflora (bacteria, actinomycetes, fungi, etc.) has now been exposed to a new set of conditions, and will never be balanced in the same way again. This change alters the long-term survival capabilities of native species that

depend on bacterial & micorrhizal associations for nutrient and water exchange with the soil and other plants. Under future stress, such interactions will determine whether invasive, non-native plants will then have the advantage and take over. Other factors are involved, most of which we don't understand.

☒ **I apologize if I seemed to discourage hands-on habitat improvement.** My purpose in bringing up weed-pullers was not to be critical of your intentions, but to point out the futility of it, when one realizes the odds against doing any lasting good. What you accomplish when you pull weeds and replant native flora is not conservation, but beautification. I'm a big fan of increasing diversity in the native biota -- a noble goal, but it must be done on one's own land or with permission, otherwise the landowner (who has legal control of the plant life) may object or even take the problem to court.

☒ **Mr. Stoneburner,** you say at the end of your letter that perhaps you should abandon your good intentions and just go out and make money like the rest of us. If I were even more cynical and insensitive than I am, I'd applaud that notion, but your sarcasm and the reality of the quandary aren't easily dismissed. I think we humans, our agencies, institutions and alliances, are primarily self-serving. Our practices are generally short-sighted, greedy and only secondarily helpful to the newer, larger generations we continue to spawn. Does this mean we should give up our conservation ethic and stop working to make things better? Hell, no.

☒ **Your project didn't fail.** An area the size of a football field is an admirably large garden plot for one person to develop, much less to tend. If you created a nice place, even for a moment in time - something that would attract thankless butterfly-, bird- and flower-watchers like us, you obviously did a good thing. Folks wouldn't come there to look at garbage.

☒ **What can we all do to foil your dire prediction?** "From where I stand," you said, "it looks like the environment has no future in America."

- It's not just America. Our entire watery, little dust-mote floating out here in space is in some trouble. But, my favorite bumper sticker reads:

Think Globally - Act Locally

- Get together with others who feel as you do. You may find that some are a lot madder than you are. **Don't act alone.** Find nearby organizations that **do** care, and **will** spend money and time improving the immediate environment. Long Island and the Hudson Valley are loaded with them.

- **Take a stand with politicians** - Whatever their party affiliations, politicians want to get re-elected. Let them know that they should sincerely serve the interests of their constituents by doing business in a way that causes the least harm to the environment. Encourage them to be positive about cooperation between private groups, industry and agencies whenever it benefits our surroundings. If they come down on the side of nature in a single vote or propose one helpful amendment because of you, then you've succeeded wildly.

- **Network! (I hate buzz-words, but this one fits)**

If local conservation organizations would like to send in information on their goals and activities, and how to contact them, I will make that information available to our readership. Conversely, if you are an individual who wants to be contacted by conservation groups, I will (with your permission) put your email and/or snailmail address on a list that I provide to appropriate sources. If this starts to generate commercial promotions (ads, spam, etc.), I will discontinue it, but I doubt that it will happen.

☒ **Why Be Pollyanna? What if Mr. S. is Right?**

Sadly, we have inherited a horrific Old World legacy: "You ain't a real man if you don't mess with your land." Since more private lands in the U. S. and Canada are owned by women, maybe we should rethink that one. Native Americans seemed to prosper without any widespread, private land-ownership practices, and those same American Indians certainly would have been justified in saying "there goes the neighborhood" when the ancestors of many of us (the Europeans) arrived.

Land ownership and tenure practices derived from Old World cultures generally predispose the ongoing destruction of native habitats, including plants, animals and even other humans. The goals are: money, equivalent power, status and new territories into which the family (cian) may expand.

The human species is an invasive one. Most of our major activities, like foraging, hunting, mating and warlike behavior, are geared toward acquisition and procreation of our kind. Asking us to conserve, rather than to conquer, may be like asking a tiger to become a vegetarian. Yes/No?_ «Esc» to exit screaming

Reader Opinions: What do you, the readers, have to say to Mr. Stoneburner or anyone else who is saddened and discouraged by the path that conservation has taken since the first Earth Day? Please write. I'm actually starting to enjoy this. And, thanks for reading on, if you haven't given up by now. **(Editor)**

More Letters to the Editor:

Dear Dick,

Couldn't agree more with your editorial about invasive plants. The enemy is us!

I did some forest inventories in tropical hammocks of the Florida Keys and found, guess what!... not a single non-native tree in the undisturbed hammocks. We all know what a mess the rest of native Florida is, especially the Everglades. You are fighting the good fight. Good luck, Andy Greller, Queens College, CUNY, Flushing, NY

Dear Dr. Mitchell,

Congratulations on a much-needed rebuttal of the invasive plant mania in the July issue of the Newsletter. Your experiences parallel my own quite closely, both in the Adirondacks and in southeastern Pennsylvania. Richard W. Lighty

Dear Dr. Mitchell,

I applaud your "speculative editorial." [...] Regarding purple loosestrife, part of the propaganda against it claims that, as an alien, it does not contribute to our local ecosystems. However, some recent articles refute that. Several species of birds and other animals do use it. [...] Wishing you good luck in your efforts to inject more science into feel-good ecology.

Sincerely yours, Donald A. Windsor, Norwich, NY.

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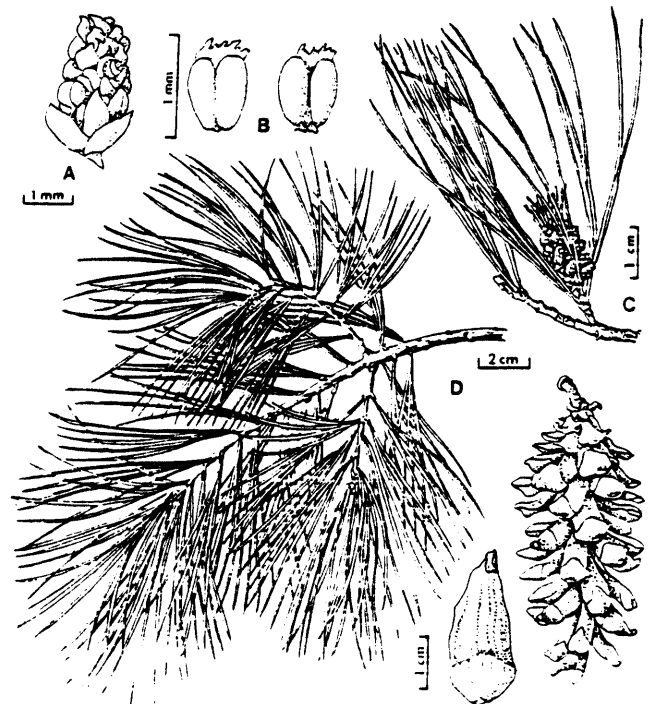
Mr. Windsor's article is oddly interesting, in that it compares modern conservation accomplishments with Schindler's List -- an effort through which only .018% of the people under attack were actually saved from extermination by the Nazis. He also questions the recent "hit-list" of least-wanted plants published by The Nature Conservancy (1996), and calls attention to the large number of native plants and animals that are equally as aggressive in disturbed situations.

See: Flack, S. & E. Furlow. 1996. America's least wanted. *Nature Conservancy* 46(6): 17-23.

My afterthought is that no one seems to be proposing that we extirpate the white pine because of its extremely weedy, aggressive behavior. (see below)

Also -- a prominent person in public life (a politician whom I won't identify) recently made a suggestion that we use gas chambers to eliminate Canada geese and their very real menace to the environment, but his idea was considered a travesty by most people.

Me? -- I'm just confused! Are there really "good and bad" species? And, if so, aren't we about the worst? [Editor]



White Pine (*Pinus strobus* L.) A dangerously aggressive weed-tree that takes over old fields, often forming pure stands. Scientists have proposed that a task force of Ivy League professors be assigned to develop a giant weevil or killer blister-rust that will extirpate this noxious species. Thus, woody monocultures will not come to dominate great tracts of land as they did in the mid-19th century. Concerns for other pines that might be attacked by the new biological control organisms were dismissed, because the danger was found only where white pines occur nearby (*ie.* everywhere).

Questions: Which of the foregoing is a total lie or distortion of the facts, and which is not? Hard to tell sometimes? Should I suggest that all the evil white pines be harvested and disposed of by a "non-profit" organization run by me?

O. K., Some Truths About White Pine

Pinus strobus L. WHITE PINE

■ An evergreen, cone-bearing tree of a great many habitats, ranging from well-drained, sandy loams and rocky ridges to water-saturated soils of woodland borders and fields; often colonizing in pure stands, but also a component of a number of mixed hardwood and conifer forest communities; pure stands may persist for many years, seeding out into clearings and fields following fire, cultivation, logging, windthrow or other disturbances; following succession, individual white pines may remain as giant emergent trees, forming an overstory; these trees are also found in moist bottomlands with hemlock, where they survive flooding on hummocks and small areas of high ground; there, they may eventually overtop the swampforest; moist, lowland woods, wet savannas and shrublands; widely grown in plantations.

The omnipresence of white pine as an invader, following the clear-cutting of virgin, old-growth and second-growth forests during the 18th and 19th centuries, led many to believe that a "white pine forest" community was an original, major component of the natural vegetation of the region. While such forests did occur on the Great Lakes Plains, pure stands had largely developed as a result of human and natural disturbances elsewhere. Subsequent reduction of white pine forests has helped to return this species to its natural role as a successional element, some of whose members can survive to become emergent giants.

Very Common: OPEN & FORESTED MINERAL SOIL WETLANDS & PEATLANDS: rich hemlock-hardwood peat swamp; northern white cedar swamp; red maple swamp; highbush blueberry bog/thicket; sphagnum bog; dwarf shrub bog; OPEN UPLANDS: successional old field; BARRENS & WOODLANDS: pitch pine-oak-heath barrens/woodland; FORESTED UPLANDS: Appalachian oak-pine forest; mixed mesophytic/oak-tulip tree forest; pine/hemlock-northern hardwood forest; TERRESTRIAL DISTURBED: plantation; brushy cleared land.

● White pines often reach heights of 100 ft or more and diameters of about two feet. They are commonly cultivated as yard and plantation trees, used on a wide scale in both governmental and private reforestation efforts. White pine is perhaps the most important lumber tree in northeastern North America, harvested for timber and pulp. The wood is used for a number of purposes, including building construction, crates, wall trim, shingles, matches, flooring and furniture manufacture. The seeds and other plant parts sometimes serve as wildlife food, and the bark has been used to make a tea for human consumption that is high in vitamin C.

□ Major threats to white pine are: 1) White pine blister rust, a fungal pathogen (*Cronartium ribicola*

J. Fisch.), which requires an alternate host of gooseberry or currant (*Ribes* spp.)

2) White pine weevil [*Pissodes strobi* (Peck)], which can attack the terminal shoots of young trees repeatedly.

From Bruce Sorrie via Email:

Much enjoyed the July 99 NYFA Newsletter! In Mass., there are any number of instances where alien plants have eliminated natives, but none properly documented. Also, I believe that in every case, disturbance preceded the invasion (or at least preceded the big onslaught). TNC/ MANHP have spent considerable \$ and person-power trying to eliminate *Phragmites* from a coastal plain pond on Cape Cod, where *Hypericum adpressum*, *Drosera filiformis*, and red-bellied turtles are threatened. An all-too-close road, with attendant salting, runoff, and siltation, is certainly the underlying problem.

Perhaps of more significance is the example of Winter Pond, in Winchester, shortly NW of Boston. Fernald used to take his students there (whether they wanted to go or not was not an issue!) to see *Echinodorus parvulus*, *Scirpus hallii*, *Ludwigia polycarpa*, and *Coreopsis rosea*, among others. He saw all of them up until the early 1930s. I combed the place on a number of occasions during the 80s and found only a few *L. polycarpa* plants. This despite the fact that *Scirpus purshianus*, a close relative of *S. hallii*, had banner crops. Hydrology had not changed, but nutrient input had dramatically via road runoff and a leaky sewer pipe that the engineers in all their wisdom ran right across the pond. Purple loosestrife occupied the entire shore, from mid-to upper zones; only the extreme drawdown zone escaped, but none of the rarities could be found there either. Both the *Echinodorus* and *Scirpus hallii* are AWOL in MA. Both had good specimen-collection records dating back to the 1880s or earlier.

Re: your aside on p. 3 [no weeds in undisturbed places] I see that sort of thing routinely, especially down here [NC] in fire-maintained communities. On Fort Bragg, we kept track of all species encountered and their native status. It soon became evident that aliens stayed strictly out of natural habitats, despite jillions of troops running all over the place. This scenario has been repeated (*pers. obs.*) throughout the fire-maintained longleaf pine ecosystem from NC-LA. Sure, aliens do occur here-and-there, but always for a reason (recent logging, road building, etc.). One of the real puzzlers is the alien grass *Eragrostis curvula*, which highway folk and game managers love to use as a soil stabilizer. Moreover, it not only tolerates fire, but seems to thrive on it. It has been planted abundantly on Ft. Bragg and the Sandhills Game Lands and has spread via rhizomes and seeds to occupy acres and acres of roadsides, parachute drop zones, etc., but does not occur within a single natural longleaf community!! Figure that one out. Clearly, fire is not the only factor operating to keep out aliens.