



George Landis Arboretum

NEWSLETTER

Published Quarterly by the Friends of the Arboretum

Volume 2, Number 1

January, February, March 1983

DIRECTOR'S REPORT - 1982

The year 1982 was a difficult one for upkeep; the weather was exasperating. Spring and early summer were continually wet and cold, the ground always soggy. At times it was so bad that all the paths through the arboretum had to be mowed with walking mowers, because any tractor pulling the gang mower did more harm than good by sliding and tearing up the paths.

During this same period the bloom in all the flowering sections of the arboretum was exuberant, from the magnolias right on through the lilacs and rhododendrons. But there were few pleasant days for viewers.

About the second week of July the weather suddenly turned hot and dry. The ground, which earlier had been too soggy to cultivate, now baked like a rock. Even in the middle of meadows, cracks an inch wide appeared in the earth. The growth on herbaceous material came almost to a standstill. This was fatal to some of the annual gardens and to the vegetable garden, but some of the display gardens on higher and better drained spots, where cultivation had been possible, did continue to develop and by late summer gave a good display of flowers.

Visiting was heavy all summer, partly due to numerous showings of a Public Service Announcement on WRGB (Channel 6), which was made avail-

able at no charge to the arboretum as a not-for-profit organization, and obtained through the efforts of the Friends Steering Committee.

The two great accomplishments of the summer were the completion of a new fireproof library and herbarium building, the Bernard Harkness Library and Herbarium, and the beginning of the herbarium collection, the last made possible by a grant from the New York State Natural Heritage Trust.

The library, erected on the knoll beyond the barn, overlooking the valley, proved, when all the books and herbarium cases were moved in, to be more commodious than hoped for, and will accommodate meetings of small groups, perhaps up to twenty-five persons. Since its windows face south, it will draw in the sun's warmth during the cool spring and fall months, and provide a more comfortable meeting room, if without the atmosphere of the barn meeting rooms.

The library now has about 5,000 volumes, with good collections of the basic sciences, general life science (what used to be called nature study), biology, botany, geography, horticulture, travel, history, and biography. The collection is particularly rich in books by the early plant explorers and in the small volume local floras of states, counties, and townships all over the United States,

records that will eventually be most valuable for the history of the extinction of plant species as more and more of our land is bulldozed by real estate entrepreneurs or flooded by government engineers. The collection of literature and of fiction, not really valuable for a usable arboretum library, are being left in the farmhouse for future disposal. The complete library is indexed by the Dewey Decimal System.

Now with a safe place to house our books, we will again begin buying botany and horticulture books, and we will be glad to receive any gift books or pamphlets in those categories.

Under the direction of Professor Peter Kaskeski, of the State University of New York at Cobleskill, and with his able assistants, the new herbarium collection got off to a good start of 600 - 700 mounted and identified specimens. Eventually, we hope to have specimens of all the plants in the arboretum, both native and imported, and probably also smaller collections of the roadside flowers of Texas and of the plants from the Mexican mesa from which the seeds for our Mexican seed exchange list are collected.

Not many new growing specimens were put in the field this year, the arboretum being already slightly more extended than its budget allows for good upkeep. However, we have started in the sunpit many seedlings of borderline hardiness plants or of so far unsuccessful species, with which to replace old losses: *Pinus lambertiana*, *Pinus albicaulis*, *Pinus bungeana*, *Tsuga mertensiana*, *Picea breweriana*, and *Picea sitchensis*, all of these from seeds collected from native stands, in the hope of finding among the seedlings specimens either hardier or more adaptable to our soil conditions. We are particularly

anxious to develop fruiting specimens of *Picea sitchensis*, so that we may try to hybridize it with *Picea glauca* to get, for reforesting, a spruce as rapidly growing as *P. sitchensis* and hardy in the north-east. A Swiss forester at the Syracuse University College of Forestry started such a program some years ago, but died before getting the cross made. We had heard rumors that someone in the lower midwest has crossed *Pinus griffithi*, the fast-growing Himalayan pine with long drooping needles, with *Pinus strobus* for the same purpose, but we have never been able to verify this report nor have we heard of available seedlings. If anyone can verify this report and tell us the results, we would be thankful. We can never make the cross here, because *P. griffithi* is hopelessly tender, but eventually we hope to be able to make a similar cross between *Pinus armandi* and *P. strobus*.

Part of the construction of the new library involved landscaping the building without trees too close to it, and for this we have begun a collection of dwarf conifers, a garden in memory of Harriet Peck, RPI librarian for many years, and the first Friend of the Arboretum. Our collection of dwarf conifers has always been spotty. Our earliest collection was lost when the local road through the arboretum was widened. A second collection was started at the edge of the Quarry Rock Garden, but could not be continued for lack of space. Here and there in the arboretum are dwarf conifers that were bought or given as forest growing trees but turned out to be dwarfs. Then, about four years ago, another dwarf conifer garden was started on the knoll above the farmhouse. Most of these will now be consolidated in the Harriet Peck Memorial Garden, though the older plants, too old for safe transplanting, will have to be incorporated by means of cuttings.

Of all of our current activities, our international seed exchange is the most booming, particularly since we have added a supplementary June list of seeds, mostly from Mexico. Everybody around the world, it seems, wants seeds of Mexican pines and oaks, probably because Mexico is a young land geologically, and both pines and oaks are hybridizing toward new species there faster than anywhere else in the world. Seed exchange is becoming an expensive business, but we feel that it is probably the most valuable contribution we can make to international horticulture. - Fred Lape, Director



TURFACE, SCREE, AND PAPER ROCKS

(This article is written by Kathie Lippitt, who is a member of the Adirondack Chapter, American Rock Garden Society, and Friend of the Landis Arboretum. Kathie enjoys growing alpiners in her own backyard alpine house and is an avid rock gardener, in addition to maintaining an active interest in indoor gardening under fluorescent lights.)

At long last we arrived at the lake at an altitude of about 12,000 feet. It had been a long, long hike - six mountain miles - and we were deserving of a rest. We sat close together on the ground trying to keep warm. The wind stopped blowing for a second, giving us the warmth of the sun, but it started in again, immediately. We huddled more closely together, shielding each other from the continual gale. It was a day in July, full sun, about as hot as a day would be in summer at Venable Lake in the Colorado Rockies.

The continual strong wind, big rocks, little rocks, and grasses surround the wee flowering alpine plants. They aren't nestled close together. They were spaced 4-6 inches apart. There is no loose dirt or loose anything else about them, because of the constant wind. We can get seeds and plants of these minute treasures, but then were do we get the gale force winds - and what is the purpose of rock in the rock garden anyway?

The plants won't miss the cold quite so much as they will miss the constant wind - it doesn't allow a fungus or a plant disease to settle among them.

Rock in rock gardens can serve four very useful purposes. First, big rocks can give shade to roots of plants; little rocks can be used as a mulch; rock can also constrict the space plants have to grow in, possibly making them bloom sooner. The fourth, and most important, purpose of rock is that it is a major component of the soil in which these plants grow. You are all familiar with perlite in Cornell mix? Perlite is rock and it would be perfect for rock gardens if it didn't soon fall apart and become powder.

The rock I would like to talk about is the size of perlite, is used half and half with good garden soil, and water races through it. The term for this particular soil mixture is scree, the same term used for the accumulation of rock debris at the foot of the mountain. The small size of rock used to make the scree is called "chippings" by the English. In this country we once could buy it as chicken, hen, or turkey grit (three different sizes), but then it was added to the chicken feed and mostly taken off the market. The grit provided a selection of sizes for the rock gardener. Now, I use crushed granite, the smallest size a little larger than I would like, but better than nothing.

Turface is a new soil additive, acid, an insoluble clay. It absorbs water and releases it gradually, is never wet around the roots of plants. It comes in two sizes, one small and quite uniform, under 1/4 inch, and the other rather largish, not so uniform, probably one inch in size. Look for shale and slate which are also good.

You may well ask why we want to protect the roots of alpiners so thoroughly. We get back to the wind, blowing away any possibility of fungus and disease. Alpiners have none of these problems until they are brought down the mountain. Many of them don't seem to mind heat, but even facing into the wind, there are too many fungi for the unacclimated roots to resist. So, keep them just a little moist, with Turface or something similar in the soil to let in all possible air.

Most rock gardeners try to keep a 3-4 inch mulch of small stones around the crowns of plants, to keep the roots cool, to retain moisture in soil, and to keep the leaves of the plants dry. The continual wind blows the leaves and crowns dry at high altitudes.

If you have a drainage problem, raise your garden a foot or so by placing rocks, cement blocks, whatever rock substitute you can think of. (Overlapping newspapers is the latest one - with much folding, it looks like rock with numerous striations.)

Sand - just plain sand, not salty sea sand - is another possibility. Put sand in a box (best without a two year old child in it), and you'll be able to grow quite a number of plants in it - *acantholimon*, *drabas*, *ptilotrichum*, *phoenicaulis*, *alyssum*, *arabis*, *penstemon* (add a little liquid fertilizer in spring),

and *phlox* (some western species are true challenges to grow). I have a couple of asters that grew beautifully in sand last year and I hope they are still with me this spring. There are a number of plants in the Pink Family beginning with *dianthus*, *gypsophilia* (*G. cerastoides*, *G. nana*, *G. repens*). Then there are the delicate little members of the family with the horrible name of *Petrohagia saxifraga* (sometimes it appears as *Tunica saxifraga*, an earlier name to which we all hope it will return). They are near perfection with sprays of double, tiny rose-like flowers from late June to fall.

My friends who major in primula tell me that these plants want peat moss in the soil. If you are going to use peat, put it through a coarse sieve, mix it thoroughly with rock chippings, and use it sparingly. Be sure no plant sits directly on it.

Leaf mold is one of the best ingredients for a rock garden. Lind Foster says it should be added half and half with stone chippings every spring. Rock gardens don't want heavy fertilizing - ever. Some of us sneak in just a little soluble fertilizer in early spring. Rich soils encourage fungus and disease, in addition to preventing bloom or making blossoms larger than they should be. Given good garden loam and stone chippings, alpiners flower beautifully without fertilizer.

References: *Rock Gardening*, H. Lincoln Foster, reprinted 1982, USA. *Collectors' Alpines*, Royton E. Heath, Collingridge Books, England, 1981.





FRIENDS OF THE GEORGE LANDIS ARBORETUM

1982

FRIENDS

Nicholas S. Argyros
Fred and Marilyn Barnes
Mrs. William Barnett
Muriel and Louis Barron
Margaret E. Biener
Josephine T. Blondo
Gary Bogart
William E. Boyce
Stanley Brown
Bess Burns
J. Canning
Dorothy L. Clark
Thomas B. Clarke
Carmine J. Clemente
Christopher and Kathleen Cooper
Forest M. Corbin
Dr. and Mrs. Robert Daniels
Louise and John Daniels
Ruth D. Estey
Miss Ida V. Felch
Miss Deborah Friedman
Ruben Garcia
Arthur R. Garland
Doris I. Gdula
Peter Gigante
Miss Eleanor Gochanour
Linda Greenwald
George J. Habetler
Richard S. Halsey
H. F. Herbrandson
Mrs. John D. Hecox
Mrs. John Hogan
Mrs. Arthur F. Jones
Carol F. Kirk
Barbara J. Kolapakka
Mrs. R. J. Lapham
Mary Lawrence
Gillian Lindt
Katherine J. Lippitt
Jesus Lopez
Dr. Currie D. Marr
Mrs. C. M. McFarland
Eleanor H. McHugh
George Mileski
Charles Monthie

Dr. and Mrs. Frank Moore
Evelyn M. Murray
Linda Myers
Dorothy Naple
Joyce E. Overholtzer
Joseph E. Palko
Mrs. Joseph F. Pokorny
Mrs. Clarence Poutre
Earl Pudney
Ronald Pulliam
Marietta Rapaso
Carinne Rasmussen
Margaret R. Reilly
Norma S. Rhodes
Mrs. Roger L. Russell, Jr.
Mrs. Ditte Sayers
John R. Schaffer
Barbara Shields
Virginia B. Shite
Marie D. Shore
Richard Sponable
Carl Taeubner
Betsy P. Thompson
Eleanor Turowski
Grace B. Von Linden
Mrs. Mary E. Von Oosten
Freek and Ina Vrugtman
Mrs. R. Weisman
Mrs. A. B. Wellborn
John White
Virginia B. White
Stuart C. White
Carol Wock
Frederick C. Wood
Lu C. and Doris I. Wood

Adirondack Chapter, American
Rock Garden Society
Country Garden Club
Indian Creek Garden Club
Louise Beebe Wilder Garden Club
Monday Garden Club
Niskayuna Garden Club
Quelques Fleurs Garden Club
Schoharie Valley Garden Club
N.S.D.A.R., Hannakrois Chapter

SPONSOR

Dr. and Mrs. David Baldwin
Jane Barton and Edythe J. Meserand
Harold C. Bieber
Mr. and Mrs. Hector Blair
John Bousman
Dr. and Mrs. Daniel Burns
Donald and Audrey Christman
Elizabeth Corning
Agnes DeKay
Mrs. H. L. Dwyer
Mari E. Farmer
Dr. and Mrs. Thomas Farrell
Fran and Herm Finkbeiner
Mary Ann Finley
Paul Fleishman
Mr. and Mrs. Perry Fraser
Robert Gaesser
Dr. Alfred R. Gilbert
Clarence A. Gillespie
Ephraim P. Goodman
Mrs. Norma B. Griffeth
Janet and Phillip B. Hawkes
Byron and Margaret Hipple
Mr. and Mrs. Olen Houck
Gloria Hunter
Charles R. Hurst
Joan M. Johnson
Lawrence C. Kolb
Mr. and Mrs. Robert Laing
Margaret O. Meir
Martin Meyer, Jr.
Virginia Oliver
Clara E. Radtke
Dr. and Mrs. Robert Raymond
Shirley Redington
Sayla C. Ruscitto
Mrs. Roland Schmitt
Dr. R. Foster Scott
Mrs. Max Shaul
Adele and John Slocum
Richard A. Southwick, Sr.
Donald C. Stewart
Mr. and Mrs. Leonard Sutton
Margaret R. Tubbs
Mrs. Sidney Urbach
Frederick Watts, Jr.
Mary A. Westendorp
Charles S. Wooley
Paul Young

AT&T Long Lines Cultural
Matching Gifts Program
Johnson-Dawes Company

Northeastern New York
Nurserymen's Association
Dana Natural History Society

Caduseus Garden Club
Dutch Valley Garden Club
Gardeners Workshop
Guilderland Garden Club
Hugh Plat Garden Club
West Hill Garden Club

SUPPORTING

Merrill Bousman
John B. Bush, Jr.
Nelson P. Collamer
Kenyon Miers
Wilhelm J. A. Moser
Philip G. Mudge
Richard A. Paul
Elizabeth R. Plauth
Donald G. Rexford
John and Patricia Tiebout
Judith Watts

Garden Club of Schenectady
Indoor Light Gardening Society,
Hudson-Mohawk Chapter
Story's Nursery

PATRON

Wayne and Ann B'Brells
Robert B. Clark
Mr. and Mrs. James Gage
Mrs. William B. Jordan
Fred Lape
Margaret S. Law
Maynard Z. Loux
Mr. and Mrs. Harold Martin
Ruth B. and Rogers McVaugh
Dale Morgan

Central National Bank, Canajoharie
Glenmont Job Corps, Student
Government
Power Technologies, Inc.

RALPH E. PLAUTH MEMORIAL - \$710



CALENDAR

GEORGE LANDIS ARBORETUM

Esperance, NY 12066
(518)-875-6935

Summer 1983

May 7	10 a.m.	Nature Walk	Fred Lape
May 14	7 a.m. 10 a.m.	Bird Walk Bird Walk	John Bousman Sayla Ruscitto
May 21	10 a.m.	Ground Covers	Merrill Bousman
June 4	10 a.m.	Treasured Spring Trees and Shrubs of the Arboretum	James Bates
June 11	1 p.m. 2 p.m.	Rare Plant Sale - Friends of the Arboretum Rare Plant Sale - General Public And, the Adirondack Chapter of the American Rock Garden Society will also hold an exhibit and sale of rock garden plants.	
June 18	10 a.m.	Plant Propagation	Richard Southwick
June 25	10 a.m.	Berrying Shrubs for Home Gardens	Keith Kohanski
July 9	10 a.m.	Conifer Walk	Fred Lape
July 16	10 a.m.	Wildflower Slides	
July 23	1 p.m.	Bonsai Exhibit and Clinic	Esther Jordan
July 30	10 a.m.	My Five Favorite Perennials	A Sharing Experience
August 6	10 a.m.	Woody Plants for All Seasons	Tim Smalley
August 20	10 a.m.	Life of the Monarch Butterfly	Sayla Ruscitto
August 27	10 a.m.	My Five Favorite Annuals	A Sharing Experience
September 10	1 p.m.	Flower Arrangement	Sally Gage
September 17	10 a.m.	Slides	Mrs. E. Corning
September 24			
October 1	10 a.m.	Foliage Walk	Fred Lape

ALL EVENTS ARE ON SATURDAYS AND ARE FREE.
PICNIC TABLES ARE AVAILABLE FOR THOSE WHO WISH TO BRING A LUNCH.

PROPER PRUNING

(The following article is distributed through Cooperative Extension Service from information provided by Dr. Alex L. Shigo, Chief Scientist, USDA Forest Service, Northeastern Forest Experiment Station, Durham, NH. Information gathered by the Forest Service and Dr. Shigo suggests that the familiar flush cut may be incorrect.)

"Proper pruning is not a cure-all for trees. Proper pruning is the best thing you can do for your tree; improper pruning is the worst thing you can do for your tree. Much of what is done to some trees cannot even be dignified by calling it pruning.

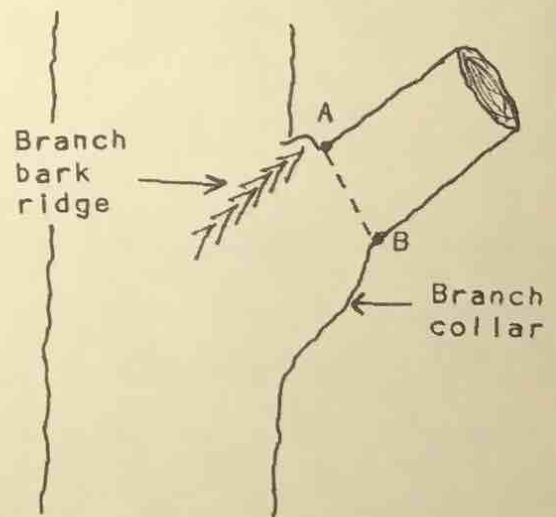
"There are two parts to this story. Some people do not care; they only want to cut the tree back. How they do it is not important. Some people do care; they want to maintain a safe, attractive, and healthy tree by pruning it in the best way possible. I should like to address my comments to the second group.

"I believe that trees came with a full set of instructions. Our task in research is to learn how to read the instructions.

"As a tree grows, it sets buds at the end of the growth season that will become the new growing points for the next growing season. There are many types of bud positions, but one bud usually becomes dominant, and the others subdominant. The dominant bud becomes the leader and the subdominants become the branches.

"As the dominant and subdominant shoots grow, they separate themselves by a hard, woody tissue, which becomes obvious in the bark as a slightly raised ridge. This is the branch bark ridge, the tissue separating the branch from the main stem. The branch bark ridge is your guide for proper pruning. Place the shears or saw in front of the ridge and cut downward and slightly outward.

"Then you will remove the branch and not injure the main stem. The same procedure should be used for pruning smaller branches from a larger branch. There is another important reason why such cuts should be made. As the branch begins to wane, the tree begins to form a protective layer in the wood around the base of the branch. This tissue is called the branch collar.



1. Stub the branch
2. Find A (Branch bark ridge)
3. Find B (Branch collar)
4. If branch collar is not obvious, cut branch at an angle opposite the branch bark ridge.
5. Do not leave a stub.
6. Do not flush cut.
7. Do not paint wound except for cosmetic purposes.

"A cut behind the branch bark ridge will not only injure the main stem, but it will remove the internal chemical protective layer. When this layer is removed by a cut flush with the stem, the tree-inhabiting microorganisms have easy access to the wood above and below the branch. Internal cracks may also result from such harsh cuts. The cracks may split outward later in the life of the tree.

"In summary, with hardwoods and conifers, do not injure or remove the branch collar on living, dying, or dead branches. Do not paint the wound, unless for cosmetic reasons. And, if you do, use a very thin coat of some commercial material. Do not use house paints. The best time to prune most trees is at the end of the dormant period. If possible, avoid pruning during the time leaves are expanding." - Alex L. Shigo



DUES

The enclosed list of contributors to the Arboretum has recently been updated and corrected. We apologize if an error was made in your name or in your organization. If your name on the list or on your mailing label is incorrect, please phone the newsletter editor at 371-9145.

A red check mark on the mailing label on this newsletter indicates that the Arboretum received no contribution from you during 1982. Please send your check NOW if you wish to continue your membership and to receive this publication with its news of arboretum activities.

Remember, 1983 memberships are now due. Your contributions are essential to the Landis Arboretum and are deeply appreciated. Use the handy form provided below.

CUT

Friend, \$10-25
 Sponsor, \$25-50
 Supporting, \$50-100
 Patron, \$100 or more

GEORGE LANDIS ARBORETUM
 Membership Application



Please support the extensive work of the arboretum and make a tax deductible contribution.

Name _____

Address _____

_____ Zip _____

Phone _____ Renewal

Amount Enclosed _____ New Member

THANK YOU!

Members receive a quarterly newsletter, free admission to the lecture series and early admission to the annual rare plant sale. Make your check payable to:

Mail to: GEORGE LANDIS ARBORETUM
 Esperance, NY 12066

BEST WISHES

Maynard Loux, charter Trustee and longtime Friend of the Landis Arboretum is moving to Fort Myers, Florida. We will miss Maynard's active participation in arboretum affairs, and we wish him well in the Florida sun.

Publishing deadlines are the first of February, May, August, and November. You may write or phone me at the address below.

Fran Finkbeiner, Editor
River View at Sugar Hill
RD 2, Box 322
Rexford, NY 12148
(518) 371-9145

COMING!

The popular Friends' Potluck Picnic will be held on Sunday, May 22, 2-4 p.m. at the arboretum.

Plans for the afternoon include election of the Friends' first officers, discussion of future activities proposed by the Friends' Steering Committee, a bit of entertainment - and, of course, food.

Watch for a reminder in your mail.



GEORGE LANDIS ARBORETUM
Lape Road
P.O. Box 242
Esperance, NY 12066

Non-Profit Organization
U.S. Postage Paid
Esperance, NY
Permit No. 6
