UNIVERSITY OF IDAHO
ARBORETUM
& BOTANICAL GARDEN

PLEASE VISIT
OUR WEB SITE AT
www.uidaho.edu/arboretum

Inside this Issue

ARBORNOTES

A Newsletter of the Arboretum Associates April 2009

The Arboretum Barn at 101 Years Old

The sole structure in the University of Idaho's Arboretum and Botanical Garden is the prominent barn, constructed in 1908 at the southern end, 1200 West Palouse River Road. The voluminous structure measures 4,392 square feet area on each of the two, tri-level floors; the floor levels are reflected by the three steps of the external lap siding. The barn is 61 feet wide (East-West), 72 feet wide (North-South), and 40 feet high (ground to gable peak). This barn is without a poured concrete foundation; the lowermost timbers rest on bricks and stones. It was built to support a small farming operation with cattle and horses—thus necessitating a huge hayloft over the ground floor. Constructed well before hay baling became the norm, the massive barn loft was annually filled with many tons of loose dry hay—raised to the loft by the standard rope and rail hayfork system through the wide open door at the east side gable. Once inside the barn, the rope-driven hayfork moved loads of hay along the gable-mounted rail for dropping and subsequent laborious hand-distribution throughout the loft for winter storage.

The Arboretum barn is the oldest barn on the University of Idaho Moscow campus. Although many details of this barn's history have not yet been uncovered, I have recovered some key events of its earlier days. During the last century there have been many modifications and changed uses of the classical barn which is an integral part of the Arboretum at its southern end.

Arboretum Barn, built in 1908, photographed summer, 1928 by John Leudke who with his wife, Rowena owned the property just before they sold the farm to Amil and May Fleiger in autumn, 1929. Note the two ropes extending from the gable to the ground on the right; these ropes were horse-pulled to take the loaded hayfork to the hayloft.

Thus far the earliest recovered photograph of the barn was made in summer 1928 by John Leudke who with his wife, Rowena, owned that farm; in autumn 1929 they sold the farm to Amil R. and May Fleiger and moved to Genesee, Idaho.

continued

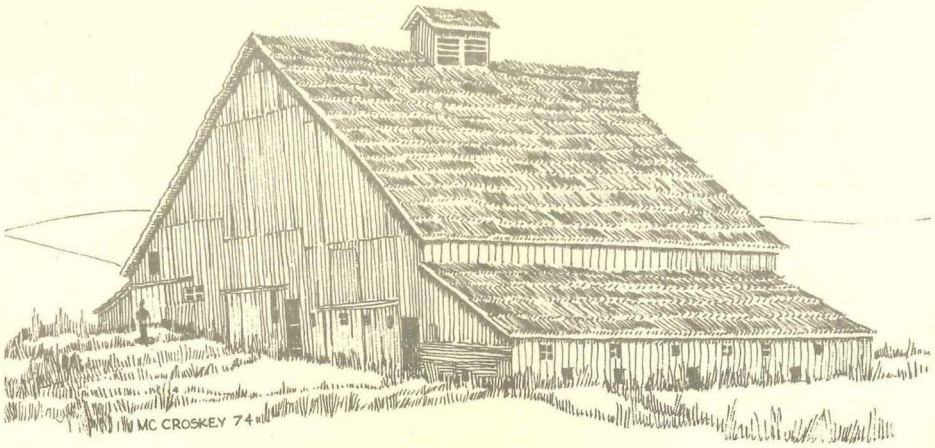
ARBORNOTES

A Newsletter of
the Arboretum Associates
University of Idaho
Arboretum and Botanical Garden

Published by
ARBORETUM ASSOCIATES
University of Idaho
P.O. Box 443143
Moscow, Idaho 83844-3143
arbassoc@uidaho.edu

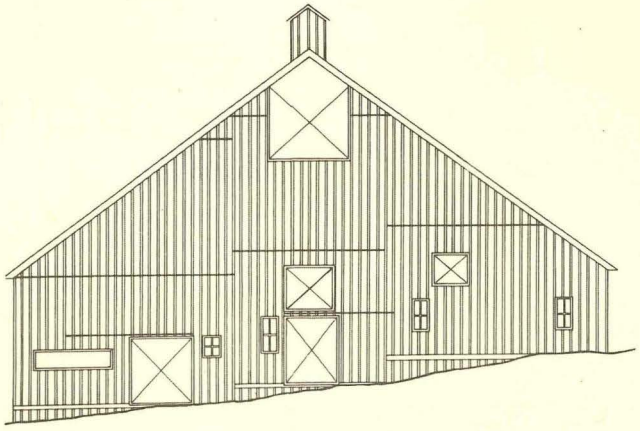
APRIL 2009

Amil Rudolph Fleiger (b. Janury 27, 1881; d. March 14, 1966) and his wife, Sarah May Fleiger (b. May 8, 1891; d. April 4, 1983) farmed the land and raised nine children in Moscow. Shortly after purchasing the farm (that now constitutes much of the Arboretum) the Fleigers expanded the farmhouse in which they raised their family. In October, 1960 Amil and May Fleiger conveyed their farm to the Regents of the University of Idaho with the proviso that they could live in the farmhouse as a life estate. In summer 1994 their farmhouse was sold by the University of Idaho for $2,800 and moved by a private contractor to Eid Road south of Moscow where it now stands.



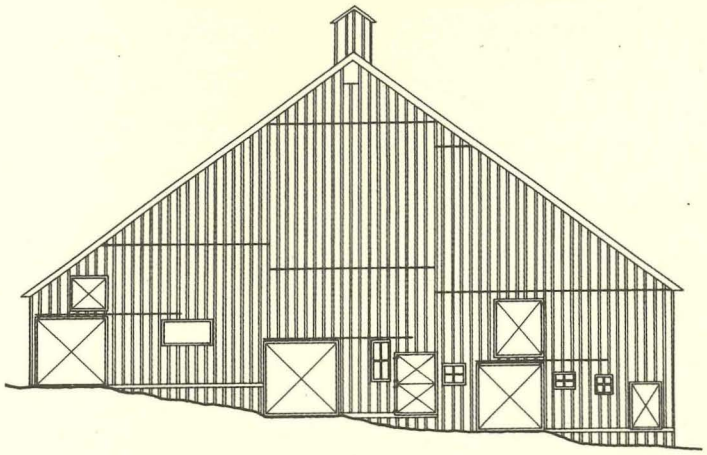
Arboretum Barn sketched 1974 by University of Idaho Professor William "Bert" McCroskey as viewed from the southwest. The lean-to sheds, added in the 1940's or 1950's by Amil Fleiger as hogsheds, were removed summer 1988 to restore the original appearance of the barn.

In 1974 the university began actions toward the development of a new Arboretum in the entire valley south of the President's Residence to include the former Fleiger farm. Richard Carothers and Associates (landscape architects) of Seattle, Portland, and Boise were contracted for the master planning which was completed and accepted by the University of Idaho Regents in 1980.

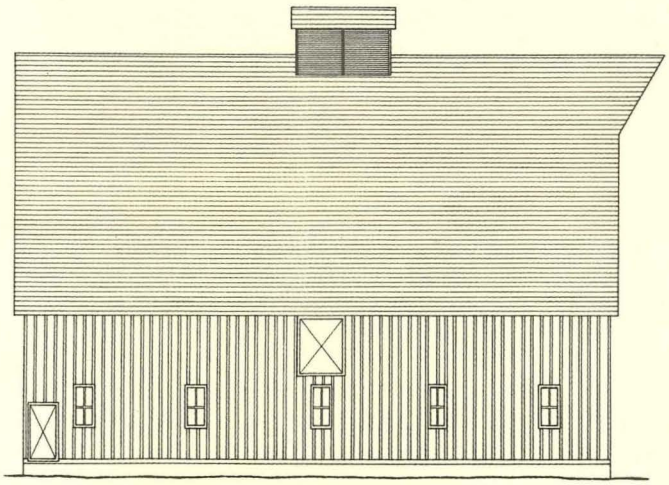


View of the east side of the barn as it was originally seen at construction with original windows, doors, and the gable ventilator. Note the three-stepped lap siding which mirrors the internal stepped ground and hayloft floors. 1989 drawing by Mike Giffith.

Sometime in the 1940's or 1950's, the Fleigers added lean-to sheds on the north and south sides of their barn in order to raise hogs. In 1974, University of Idaho Professor William "Bert" McCroskey made an ink drawing of the barn as it existed with Amil Fleiger's lean-to sheds.



View of the west side of the barn as it was originally seen at construction with original windows, doors, and the gable ventilator. Note the three-stepped lap siding which mirrors the internal stepped ground and hayloft floors. 1989 drawing by Mike Giffith.



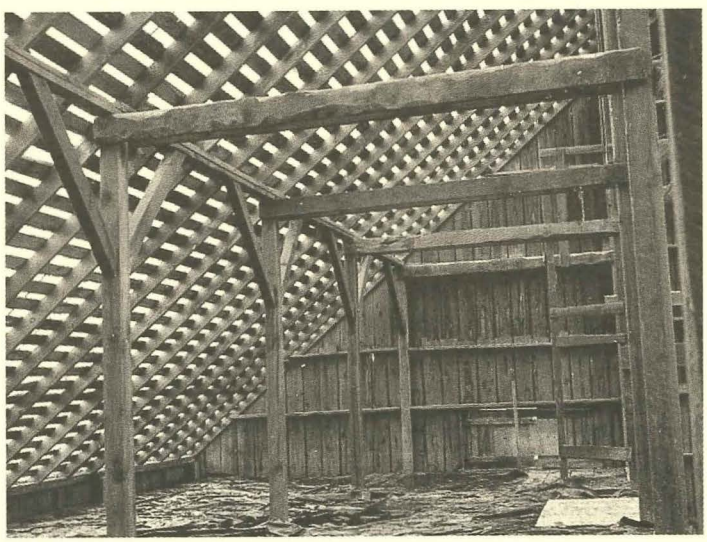
View of the south side of the barn as it was originally seen at construction with original windows, doors, and the gable ventilator. 1989 drawing by Mike Giffith.

In summer 1988 after I was appointed Arboretum Director, many volunteers assisted with the removal of the decrepit lean-to sheds and cleaning out the original barn of debris, manure, and aged cattle stalls and stanchions. Truckloads of debris from the barn plus many car bodies, old barbed wire, household debris were removed from the streambed east of the barn (where our annual flower beds are now planted). Occasionally, some broken bottles and tin cans still wash out in the valley stream section that was the Fleiger farm's "junkpile."

As Arboretum development progressed from its initial plantings of 1982, various proposals surfaced for the ultimate development of a visitor center from the initial suggestions in the 1980 Master Plan that the barn should become that visitor center. In fall semester 1990, Architecture Design I students of Professors Nels Reese, Gifford Pierce, Joe Numbers, and Dennis Chatburn assigned student groups to study the prospects of the barn for a visitor center after documenting the structure with drawings. Students made many photographs of the barn; one group prepared a scale model of the barn incorporating options for converting this barn into a two-story visitor center with possible configurations for offices, meeting rooms, etc. Drawings presented depict the barn's original features for windows, doors, and siding are derived even though most of those features were removed and/or boarded-up.

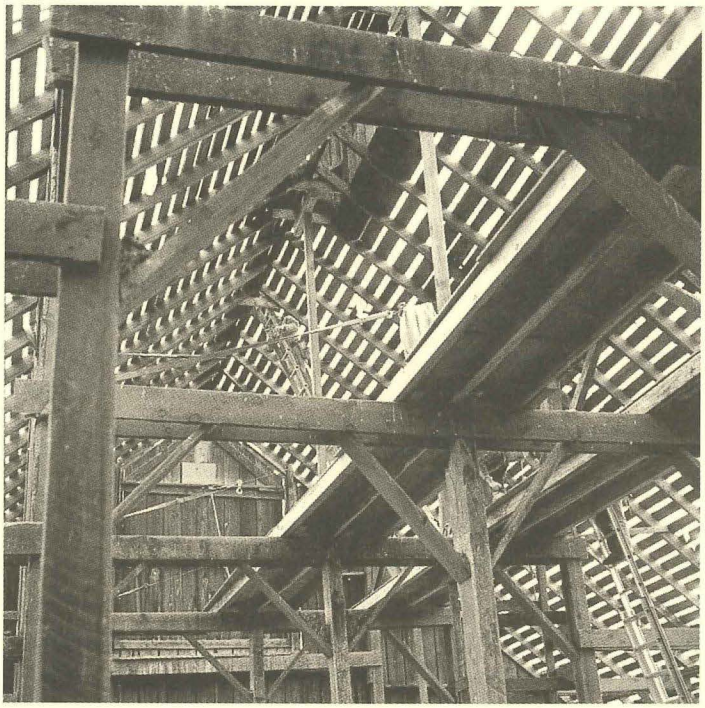
In summer 1991, Professor Roy Taylor (Extension Agricultural Engineer) extensively examined the timbers, undercroft, and structural details of the barn's superstructure. He reported that the post and beam structural framework was generally very sound. The major timbers were either Douglas-fir (*Pseudotsuga menziesii)* or Larch (*Larix occidentalis)*, "A" class members of very high quality. Taylor's greatest concern was the sill on the north side where the absence of a good foundation and water drainage had resulted in deterioration of that major sill. In his final report, Taylor concluded that the barn was "certainly renovatable."

By 1990 the ageing roofing of cedar shakes had worn thin leading to much roof leaking. Fortunately the Idaho Division of Public Works agreed to fund the re-roofing of this barn. Over the decades since its construction, the ridge had sunken somewhat. Roof trusses in barns with hayfork and rails for loading the loft, lack timbers immediately under the gable to support the gable. The University of Idaho was granted approximately $75,000 for two contracts to (1)

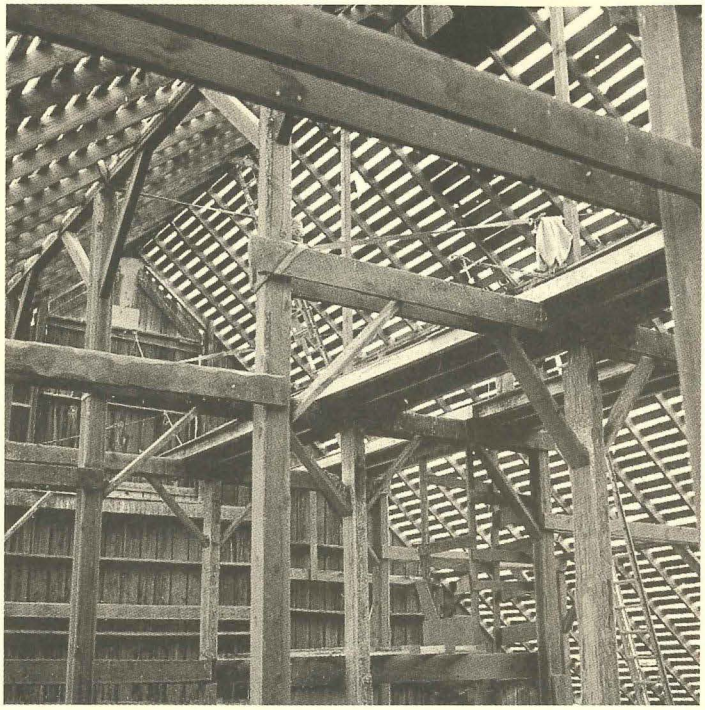


The superstructure of the hayloft after the worn cedar shakes were removed prior to re-sheathing the roof deck. Note the remnant shakes littering the floor. Photo February 3, 1998 by R.J. Naskali.

continued



The superstructure of the hayloft after the worn cedar shakes were removed prior to re-sheathing the roof deck as viewed toward the gable's roof vent opening. Note the scaffolding and ladders with contractors raising the gable peak to its original height. Photo February 3, 1998 by R.J. Naskali.



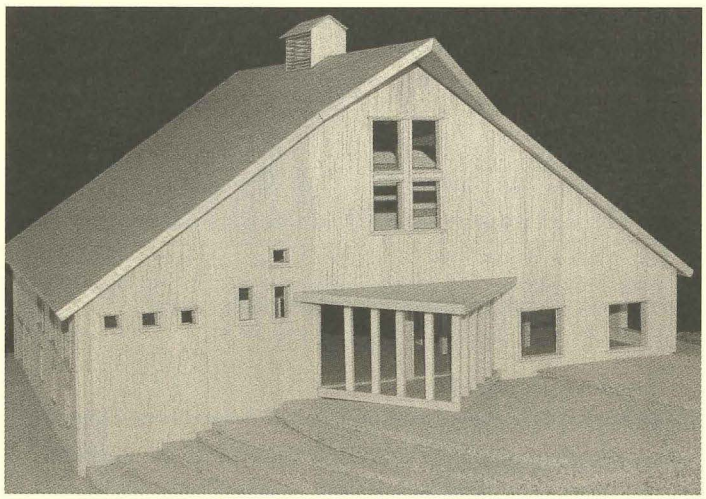
The hayloft's post and beam superstructure of the hayloft after the worn shakes were stripped and prior to resheathing with plywood. Scaffolding and lifting posts are in place to raise the gable peak to its original level. Photo February 3, 1998 by R.J. Naskali.

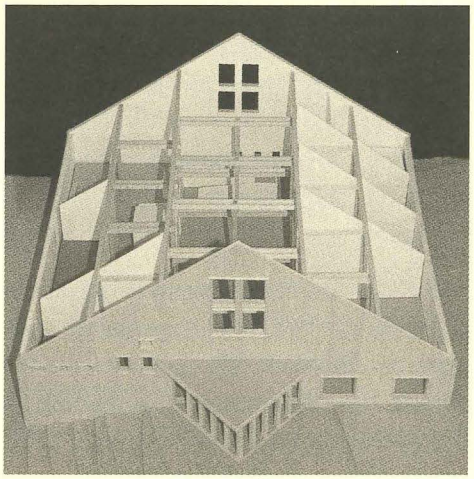
The Arboretum Barn, after re-roofing and painting, viewed from the southeast. Photo March 23 2009 by R.J. Naskali.

raise the gable ridge to its original level and add additional bracing to the trusses, and (2) remove the weathered cedar shakes, re-sheath the roof deck with plywood, and install a new, standing seam enameled steel roof. These projects were completed by midsummer, 1998. After the barn was reroofed, snow readily slides off and often leaves a huge snow pile on the north side. As a consequence, the north side of the barn was sheathed in steel siding and additional grading was made to divert water from the north sill.

Most recently for the Arboretum barn, the proceeds of the spring 2006 plant sale were used to contract the repainting of the barn late summer 2006. Although the barn is far from weatherproof, the repainting will help reduce the weathering of the barn's exterior. As time permits, I would like to explore protocols for the possible designating historical status for our important and prominent barn—the university's oldest barn on the Moscow campus.

~ R.J. Naskali





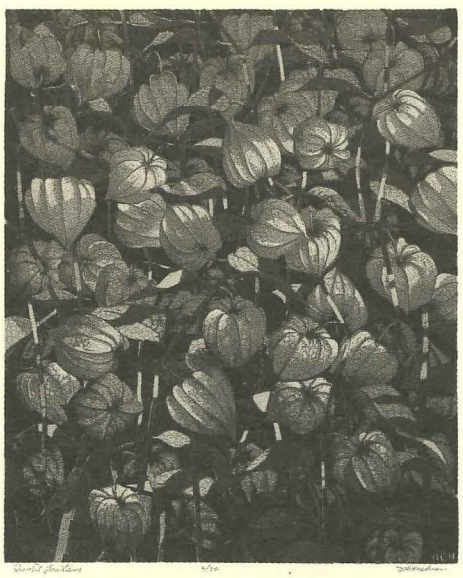
Scale model of the Arboretum Barn incorporating suggestions for Arboretum visitor center.

Annual Meeting Scheduled for April 30th
Conifer Expert Don Howse keynote speaker

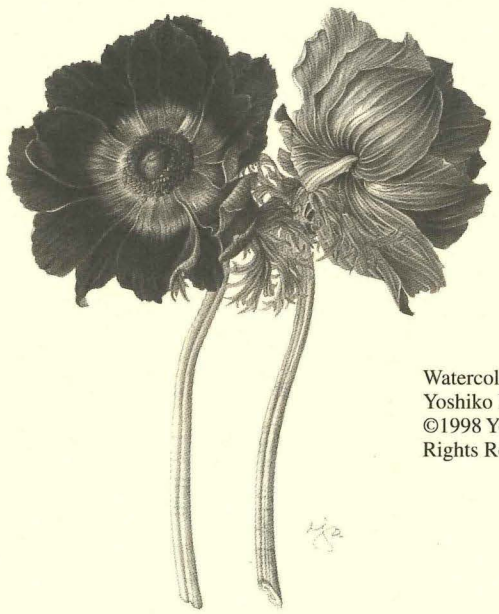
On Thursday, April 30, 2009, Arboretum Associates will hold its 32nd Annual Meeting at 7:00 PM in the University Of Idaho College Of Law Courtroom. The agenda for the business meeting will include a presentation by Paul Warnick, Arboretum Horticulturist, who will provide an overview of the year in the Arboretum as well as goals for the coming year. After the treasurer's report and the election for a vacant Board of Director's position, door prizes will be distributed and the business portion of the meeting will be adjourned so that guest speaker, Don Howse, may be introduced. Don attended the University of Idaho where he attained his BS degree, majoring in Ornamental Horticulture, and he has had an interest in collecting and growing plants, particularly conifers, most of his life. His program, *Trekking for Conifers*, will highlight his experiences traveling the globe collecting plants. He and Lloyd Porter started Porterhowse Farms in 1981 and they have been propagating and selling conifers as the primary crop since then. Don has written several articles for the *Conifer Quarterly,* the journal of the American Conifer Society, and has served as President of the Western Region of that organization. He has been a board member of both the Berry Botanic Garden and the Hoyt Arboretum Friends Foundation. With an interest in Bonsai he is currently the President of the Bonsai Society of Portland. Don is semi-retired and living on the site of Porterhowse Farms where he gardens and works in the arboretum.

Contemporary Botanical Art at the Prichard ArtGallery, May 29 to July 25, 2009

Some of the world's finest contemporary botanical art and illustration can be viewed at the University of Idaho's Prichard Art Gallery when the **12th International exhibition of Botanical Art & Illustration** opens Friday, May 29 for a two-month run in downtown Moscow. This exhibit by the Hunt Institute for Botanical Documentation (a research division of the Carnegie Mellon University, Pittsburgh, PA) presents stunning views of plants and their parts in essentially all art media: watercolors, linocuts, acrylics, gouche, pen and ink, wood engravings, graphite on scratchboard, etc.



David C. Hackman (England), Sunlit Lanterns, linocut. ©2002 David Hackman. All Rights Reserved



Watercolor of *Anemone* by Yoshiko Kamei (Japan). ©1998 Yoshiko Kamei. All Rights Reserved

Opening reception for the Hunt Institute exhibit is 5:00 – 9:00p.m., Friday, May 29 at the Prichard ArtGallery, 414-416 South Main Street, Moscow, ID. This exhibition is the highlight for **Moscow Art Walk VI** which opens with receptions at many Moscow venues (including the Prichard Gallery) Friday, June 12 from 5:00 to 8:00p.m.

~ R.J. Naskali

Arboretum Associates Annual Plant Sale

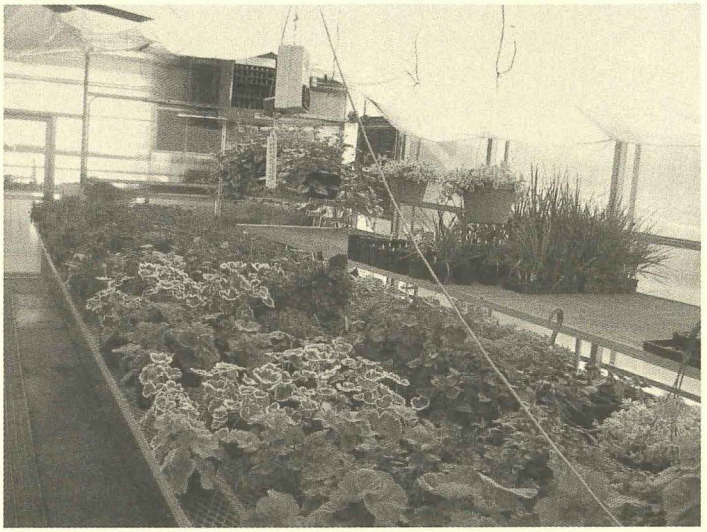
The Arboretum Associates Annual Plant Sale has become the biggest fundraiser for the Arboretum; but it has also turned into a social event, and a great source for unusual plants. Even with horrible, cold, rainy weather the 2008 sale was very successful. We are looking forward to better weather and an even better sale this year. In the past the sale has been held on the first Saturday in June. Because Memorial Day is early this year, we decided to hold it on the Saturday after Memorial Day. The sale will be on Saturday, May 30th from 9 am until 12 pm at the Skating Rink at the Latah County Fairgrounds.

As always we strive to bring in some new and unusual plants that won't be found at local nurseries, as well as plants propagated from the Arboretum—especially from the Xeriscape Demonstration Garden. We will also have a selection of more than 15 different clematis vines, ranging from the classic favorite, large purple flowered 'Jackmanii' to the daintier *C. viticella* and *C. alpina*, and three non-vining, shrubby clematis, which grow as groundcovers or low growing perennials.

Volunteers water hanging baskets planted for the sale.

Every year we have a good selection of Hosta. This year we will have everything from old favorites to four of the newest patented cultivars. One cultivar, 'Remember Me' is a 'Fight for the Cause' plant. Some royalties from this hosta are donated to support breast cancer research.

One of the concepts of xeriscaping is the use of native plants. We will be selling several Palouse Prairie native wildflowers, most of which are hard to find anywhere else. They will include, large flowered *Collomia*, Hairy Albert, Wooly sunflower, and western coneflower. There will also be a wide selection of other xeriscape plants including several ornamental grasses, more than eight different sedums, four different thymes, ten different foxtail lilies (*Eremurus*), and lots of other flowering perennials.



Selection of annuals that will be available on May 30, 2009.

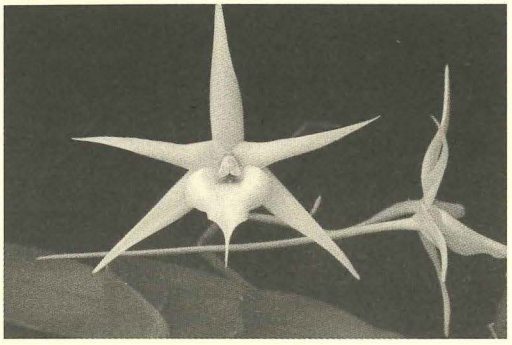
There will also be the usual choices in annual flowers, trees and shrubs along with some 'child friendly' novelty plants like Hot Dog Plant, Tapeworm Plant and Sensitive Plant. The Arboretum Associates Plant Sale will be a great place to find just the plant you need for that spot in your landscape and help support the Arboretum at the same time.

~ Paul Warnick

Perennial selections getting off to a great start to be ready for your garden in May.

Madagascan Orchids on Charles Darwin's Birthday

Publications around the world prominently reminded citizens that February 12, 2009 was the bicentennial of the birth of both Abraham Lincoln and Charles Darwin with essays and feature stories recounting the significant contributions of these two world-class citizens.



Angraecum sesquipedale orchid flowers; note the long nectar spur on the flower which is facing right. Photo January 11, 2009 by R.J. Naskali in his home greenhouse.

Among the hundreds of organisms studied by Darwin were scores of orchids which intrigued Darwin in relation to their pollinators and nectar feeders. Just three years after his 1859 *magnum opus*, Darwin first summarized his orchid studies in **'The Various Contrivances by which Orchids are Fertilized by Insects'.** During his long voyage on H.M.S Beagle, Darwin visited Madagascar. While there he encountered a spectacular orchid, *Angraecum sesquipedale,* the flowers of which have a 10+ inch long tubular nectar spur on each large white flower. Darwin puzzled—even dithered—about the kind of creature which could gain access to the nectar. Some *Angraecum* orchids are reported to have nectar spurs 12-15 inches long.

Years after Darwin died without an answer to the *Angraecum* problem, an entomologist discovered a native "hawk-moth" on Madagascar which has a sufficiently long extendable proboscis to reach the nectar in this orchid; its scientific name, *Xanthopan morganii praedicta* Rothschild et Jordan (1903) ["Morgan's Sphinx Moth"] acknowledges Darwin's prediction. Recently, this large nocturnal moth has been filmed with its proboscis unfurled feeding on *Angraecum* nectar. Some of this documentation is available on the Internet via Google.

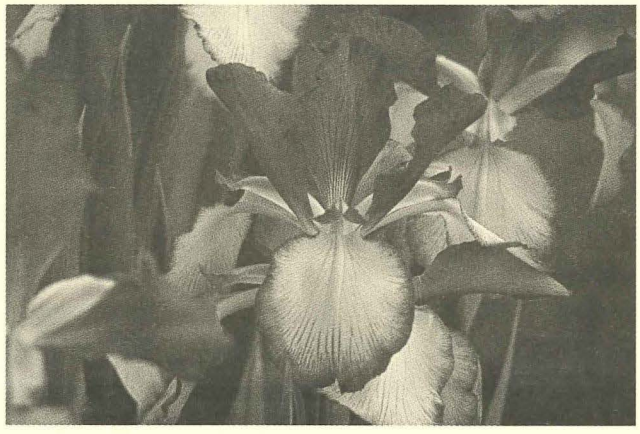
I was personally elated when both of the *Angraecum* plants in my home greenhouse were flowering on Darwin's bicentennial birthday. The nectar spurs on my plants were only 7.3 inches long.

~ R.J. Naskali

Report from the Horticulturist

It has been another unpredictable winter in Moscow, with a long, mild fall, which quickly changed to relentless snowfall around Christmas, which let up after the first of the year and changed over to unremarkable weather for the rest of the winter. The heavy snow and wind did result in some damage in the arboretum, mostly limb breakage; but three entire trees blew down in the new Arboretum along with several more in the Shattuck. Also, somewhat surprisingly, considering the snow cover and lack of clear sunny days, I am seeing some winter browning on evergreens. This usually shows up on the south side of evergreens and happens when foliage desiccates, often during sunny, but cold and dry weather periods.

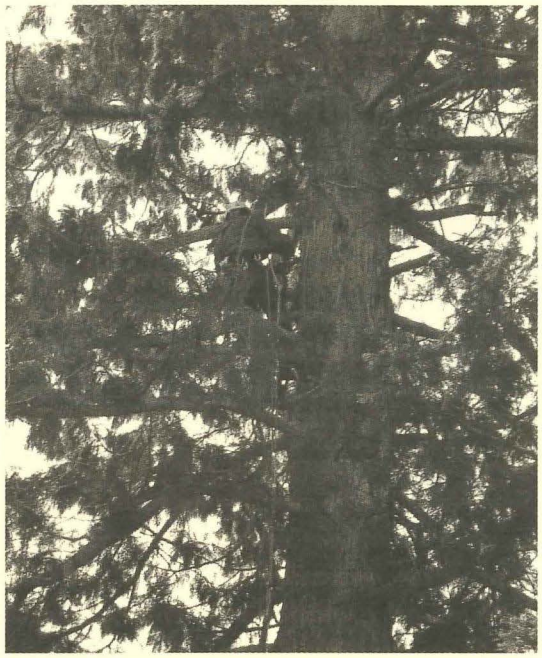
I have spent the winter updating the Arboretum database, mapping plantings, and planning for new projects. The database now includes 10,313 documented plants, comprised of 2,155 different taxa or types of plants. We planted 318 new plants in 2008, and removed 84 – fairly typical numbers for the past few years. One of the additions that we planted last fall did not get mentioned in the last newsletter. Last fall, Ken and Carol Coleman from Boise, past president of the Idaho Iris Society, generously donated 21 Spuria Iris to be planted in the Grace Yenni Iris Garden. Spuria Iris are beardless, flower after the Bearded Iris, and are generally taller than most Bearded forms. We planted the new Spurias at the north end of the Iris bed along the stream bank. They should make a great addition to the garden and lengthen the flowering season considerably.



Adriatic Blue Spuria Iris. Photo Ken Coleman.

continued

A fun outdoor project this winter was working with the campus Arborist, Ken Dola, to get scion wood, or cuttings from the Giant Sequoia in the Shattuck Arboretum. I sent the cuttings to a nursery in Oregon which agreed to graft the scions. They grafted them onto seedling Giant Sequoias, and later this spring we will know if the grafts were successful. The motivation for propagating the Sequoia came from Jesse Dahl, a student employee from 2007 who went on to work as a horticulturist at the Morton Arboretum near Chicago. The Morton Arboretum does not have any Sequoia in their collection, and they would like to try one from this far north that survived the minus 45 degree temperatures in 1968. I am convinced the Shattuck Sequoia is the oldest (and likely the largest) this far north, east of the Cascade Mountains. We will be sending samples of the new grafts to the Morton Arboretum for tests; and hopefully we will also have some available for sale at future plant sales. If the grafts are successful we will have to come up with an appropriate name, perhaps something including 'Vandal' or 'Shattuck' and ideally something reflecting its superior cold hardiness.



Ken Dola, campus arborist in Shattuck Giant Sequoia. Photo Paul Warnick.

I have also been working on plans for new projects in both the Shattuck and the new Arboretum. Working with the Arboretum Executive Committee we have developed a plan for installing benches in the Shattuck Arboretum. These benches will be different from the granite benches in the 'new' Arboretum. The proposed benches for the Shattuck will be 6' long, contoured benches with backs, much like a design used several places on campus. After some discussion it was decided to use recycled plastic for the bench slats, rather than wood. My first impression was that using plastic seemed a little weird in an Arboretum; but the advantages of less maintenance, no color fading, and the sustainability aspect of using recycled materials won me over (along with the fact that it was cheaper). There will be ten spots selected for bench installations in the Shattuck. The cost for the benches will be $2,500 (the same cost as a planting project in the new Arboretum). This includes the cost of the bench, a $1,000 donation to the Arboretum Centennial Endowment and $500 towards current maintenance costs in the Arboretum. Donors will be recognized as lifetime members of Arboretum Associates.

We installed an outdoor bulletin board on the south east side of the Arboretum barn. This will provide a spot for visitors to the south end to pick up Arboretum maps, look at monthly updates, and a place to recognize Arboretum donors. This was funded with memberships and donations to Arboretum Associates.

The biggest project is one that has been in the 'works' since 1996. At that time, the Arboretum had received a collection of vines from wild collected seeds in China. The collection includes Asian grapes, *Schisandra*, porcelain berry vine, Hardy Kiwi, and two Asian clematis. The vines were planted on the terrace slopes on the west side of the Arboretum, just south of the Forsythias. Temporary trellises constructed with a 4x4" post and a piece of chain link fence, were constructed for each of the vines. The idea has been to construct a pergola, or overhead trellis structure, to replace the temporary trellises and provide a big enough structure to allow the vines to grow to their full potential. After years of discussion, we have an approved design, and now we are waiting on final buildable plans to put the project out to bid.

We will also be planting some new projects this spring. The most dramatic additions will be a collection European Clematis, to be planted on the rock gabion wall along the west side road. We will plant sixteen new vines on both levels of the wall, along with five 'shrubby', non-vining forms in the bed between the two levels. These vines should soften the appearance of the rock wall, while providing color throughout most of the summer months. We are also planning additions to the xeriscape garden, in the north and south Idaho native sections, as well as the new bed constructed at the north end of the garden last year.

As the University struggles with reduced funding and program reductions your support for the Arboretum becomes even more important than ever. The Arboretum's maintenance funds have been cut by 20%, which will result in a smaller crew and some reductions in the level of care. However, with your support we will continue to work towards a site that the University community and the public can enjoy.

~ Paul Warnick

David Douglas, the Pacific Northwest, and the Tallest Trees in Great Britain and the U.S.A.

For centuries arboreta and botanical gardens of the world have emphasized plant exploration, introduction, conservation and education. Among the renown plant collectors, David Douglas (b. July 25, 1799; d. July 12, 1834) will ever be honored for his numerous introductions to Great Britain from Western North America—including Douglas-fir (*Pseudotsuga menziesii*), Grand Fir (*Abies grandis*), Noble Fir (*Abies procera*), several pines, many shrubs, and scores of Western North American herbaceous species.

Earlier this year, the BBC World News reported that the tallest tree in Great Britain is now the Stronardon Douglas-fir at 209.2 feet in Argyll, Scotland. Britain's second tallest tree is the Diana's Grove Grand Fir at 205.7 feet at Blair Castle, Fife, Scotland. The new record trees of February 25, 2009 report replace the two other Douglas-firs which now become numbers three and four at 203.4 feet high. Thus, seed introductions from the Pacific Northwest by David Douglas continue to thrive and gain records as trees in Great Britain.

In their native sites in Western North America, at least one Douglas-fir tree was 301 feet high in the Jeddediah Smith Redwood State Park in California; another Douglas-fir was reported to be 326.1 feet high at Brummit Creek, Coos County, Oregon. The world's tallest known conifer was the 367.5 feet tall Mendocino Tree, a coast redwood (*Sequoia sempervirens*) tree at Montgomery State Reserve near Ukiah, California.

Another Douglas-fir from North America made news in Great Britain over the last century. In 1958 a 370-year-old, 275 foot high, Douglas-fir was cut from Copper Canyon on Vancouver Island, Canada. The trunk, reduced to 226 feet and 36 tons, was shipped to London where it was floated on the River Tames to the Royal Botanic Gardens, Kew. Subsequently the log was seasoned and cut into a 15 ton single piece which became the tallest (225') wooden flagpole in the world; it was erected November 5, 1959 in the gardens at Kew—all to commemorate the bicentenary of Kew (1959) and British Columbia's centenary as a province (1958). Unfortunately, wood peckers and decay took their toll to the extent that the world's tallest wooden flagpole had to be removed August 13, 2007.

~ Richard J. Naskali

Calendar of Events

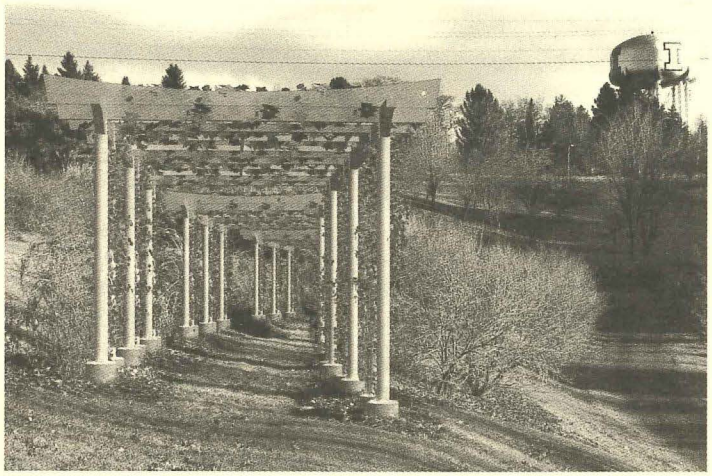
April 30, 2009 – Arboretum Associates Annual Meeting
College of Law Courtroom 7 p.m.
Speaker – Don Howse

May 30, 2009 – Arboretum Associates Plant Sale
Latah County Fairgrounds – Skating Rink
9 a.m. to 12 a.m.

July 13, 2009 – Arboretum Summer Concert
In Collaboration with the Lionel Hampton School of Music
UI Arboretum & Botanical Garden 7 p.m.

Asian Pergola Project

In early 1994-95 the Arboretum Associates donated money to the North America-China Plant Exploration Consortium, a group of Arboretum professionals who traveled to collect seeds from the wild in China. In return for that donation, the Arboretum received 125 packets of seeds from the wild collections. These seeds were planted in April 1995 and the successful propagations were planted out in the Asian section of the Arboretum in 1996 and 1997. Among those plants were several vines, including an Asian Grape '*Vitis amurensis*', hardy Kiwi '*Actinidia arguta*', magnolia vine '*Schisandra chinensis*', and Manchurian clematis '*Clematis mandshurica*'.



Pergola perspectiv. UI Facilities drawing 12-10-08.

Temporary trellises constructed of 4x4" posts and chain link fence were installed after the vines were planted on the terrace slope just south of the Forsythia. The vision since then has been to replace the temporary trellises with a permanent pergola, or overhead trellis structure. After a great deal of discussion and work we have an approved plan. The pergola will be in three sections to more easily cope with the existing terrain. It will be constructed of steel and wood to minimize maintenance. The overhead cross pieces will be curved to give the structure an Asian flair, without trying to replicate any particular Asian design. Now we are in the process of getting buildable drawings done from the approved design. Then the project will be put out to bid. Depending on how those bids come out we hope to begin construction as early as this summer. This will become an elegant, permanent addition to the Arboretum that will work to showcase the Asian vines. Based upon initial estimates of costs, donors have been identified for two of the three pergola sections. If you would be interested in sponsoring the third section or making a gift in support of the pergola project please contact Paul Warnick.

~ Paul Warnick

Message from the President

As we anticipate the eruption of color that will soon envelop the Palouse we begin to plan for the many spring and summer projects to come in the Arboretum. After years of discussion it is exciting that construction may soon begin on a pergola to replace the temporary trellises built to support the vine collection from China. Also, in a major planting project, European clematis will soon cover the rock gabion walls adding much needed color to the structure.

Few communities have a resource as valuable as the Arboretum. Not only is it a treasured horticultural storehouse, it is an incredible place of tranquil beauty. As always, the Board appreciates the support of all the members and friends of Arboretum Associates as we work together in stewardship of the University of Idaho Arboretum and Botanical Gardens. Its rich and bountiful community of plants, trees, and flowers continues to be a distinctively positive reflection of the community of people who encourage and sustain it.

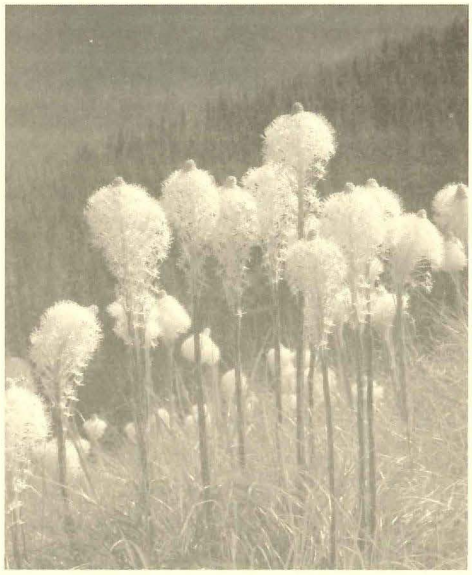
~ Jan Leander

Six Wildflower Vignettes

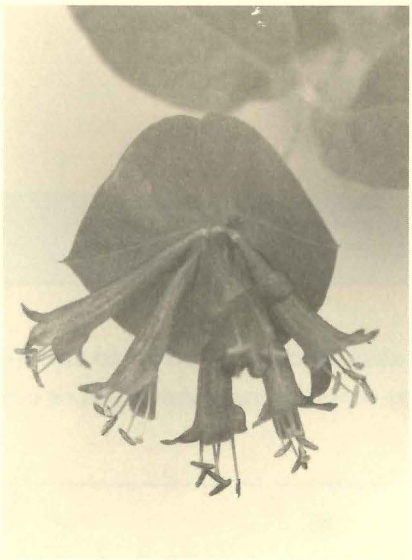
Among the scores of scenic byways in Idaho, one of my all-time favorites for 40+ years is the US Forest Service road 301 from Clarkia, ID to Freezeout Saddle—some ten miles east from Clarkia. Along this gravel road there are spectacular scenic views and numerous wildflower species to reward your spirit and camera. From April at lower elevations to about July first (when the snow has finally melted at the 6,000 foot elevation of Freezeout Saddle) you can find thousands of orchids, lupines, Indian paintbrush, pink mountain heather, etc. At Freezeout Saddle, the sub-alpine firs, huckleberries, mountain ash, and other native plants make an incredible fall color tapestry by October. Here are six wildflower photographs with the dates that I photographed them as general indicators for their variable flowering times.

False Hellebore (*Veratrum californicum*), Liliaceae, Lily Family, Derivatives of this plant are currently under intense research in relation to uses in cardiology and oncology. June 16, 2006.

~ Richard J. Naskali

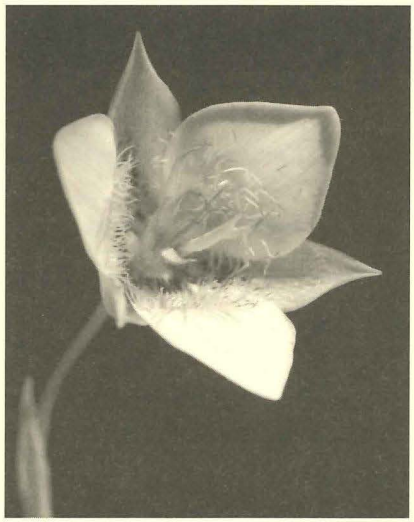


Beargrass (*Xerophyllum tenax*), Lily Family, Liliaceae; June 23, 2006.



Orange Honeysuckle (*Lonicera ciliosa*), Caprifoliaceae, Honeysuckle Family; June 17, 2006.

Ragged Robbin/ Elk Horns Clarkia (*Clarkia pulchella*), Evening Primrose Family, Onagraceae; named by Frederick Pursh (1774-1820) in honor of Captain William Clark, Meriwether Lewis' exploration partner. Fortunately, it still thrives around Clarkia, ID – but it does not grow at Clarkston, WA; June 17, 2006.



Cats-ear/Sego Lily (*Calochortus elegans*), Lily Family, Liliaceae; June 23, 2006.

University of Idaho

Arboretum Associates
PO Box 443147
Moscow, ID 83844-3147

* P B N 4 5 0 $ M *

PRESRT STD
U.S. POSTAGE
PAID
UNIVERSITY OF
IDAHO

Please renew your annual contribution to the Arboretum Associates for Fiscal Year 2009. You can help the Arboretum grow by renewing your annual gift or contributing to your favorite project fund. ***Thank You!***

Name _____

Address _____

City _____ State _____ Zip _____

Fund Contribution

Arboretum Associates	$ _____
Centennial Endowment Fund	$ _____
Other _____	$ _____
Total Contribution	$ _____

Please charge my _____ MasterCard _____ VISA

Card# _____

Expiration Date _____

Signature _____

0001Z

Membership Categories

Active	**$20 - $49**
Sustaining	**$50 - $99**
Donor	**$100 - $249**
Patron	**$250 - $499**
Sponsor	**$500 - $999**
Life Associate	**$1,000 and above**

Contributors receive our periodic ARBORNOTES. Please mail your tax deductible contributions to: Arboretum Associates, University of Idaho, P.O. Box 443147, Moscow, ID 83844-3147. Thank you.