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ArborNotes

A Newsletter of the Arboretum Associates

May 2006

Realization of a Vision – 15 Years After the Zinser-Mackin Wedding

lifteen years ago this summer, Elisabeth Zinser, President of the University of Idaho, and Don Mackin, a Moscow businessman and former Idaho state senator, were married at the University of Idaho Arboretum. Although their wedding was the first of many to be held at the Arboretum, at that time the grounds seemed to be a little bereft of natural beauty. In fact, anyone looking at the photographs of the event might be excused for asking, as some did at the time, what prompted them to make that choice for one of the significant events in their lives. Their choice, as noted in newspaper articles about



Elisabeth Zinser and Don Mackin wedding portrait July 1991. UI Photo Services photo

the wedding, recognized the value they placed on the Arboretum as the scene of much of their courtship. It also affirmed Dr. Zinser's support for the growth and development of the Arboretum.

The UI Arboretum and Botanical Garden has its roots in the early years of the Twentieth Century. The University acquired the land which is now the northern portion of the Arboretum in 1906, four years before the School of Forestry's Arboretum and Nursery



Present view of wedding site and current venue for summer concert UI Arboretum and Botanical Gardens. May 12, 2006. Bill Bowler photo

was established in the area now known as the Shattuck Arboretum. At that time, the School of Forestry began growing and shipping seedlings all across the State of Idaho and across the nation. This activity continues today, but the location of the nursery has changed. In 1960 the University acquired the farm of Amil and May Fleiger through a life grant. The University made a proposal in 1978 to use this land as a new Arboretum. According to a brief

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Come Grow With Us

history prepared as part of that proposal the barn was built in 1908 and the house was built in 1935. Mr. & Mrs. Fleiger, who had been married in 1909, purchased the farm from John and Rowena Luedke in 1931 and moved into the small house that was on the farm. The Fleigers built and moved into a new home on May 23, 1935. They raised nine children on the farm, proudly noting that all of their sons had served in World War II. Amil Fleiger died on March 14, 1966 and May Fleiger continued to live in the old farm house until her death April 4, 1983. This home was the one that stood at the southern end of the Arboretum in 1991. The University sold the farm house in November 1994 and in the summer of 1995 it was moved to a location on Eid Road, south of Moscow. The barn was retained by the University for use as part of the Arboretum. The major roof trusses were strengthened in 1997-1998 and the roof was repaired with new sheathing, felt and the shingles were replaced by steel. The funds for this project were supplied by the Idaho Division of Public Works. The barn will be repainted this summer as an Arboretum Associates project.

At the time of the proposed addition, it was known as an addition to the Shattuck Arboretum; in fact there are surviving pictures of a substantial wooden sign naming it as "Shattuck Arboretum, Phase II." In the 1970s plans were made for several projects including the development of a regional center of informa-



The Zinser Mackin wedding party with young plantings in the background. July 14,1991. R.J.Naskali photo

tion related to plant management, plant disease recognition and treatment, and landscape design. The area adjacent to the ASUI Golf Course and Walenta Drive was designated the first area to be developed. Unfortunately, as with many plans, this one was slow to develop. During the early 1980s Dr. Ernest Hartung, former president of the University of Idaho and, then, the Executive Director of the UI Foundation, worked with the Lions Club of Moscow and the Arboretum Associates on several smaller projects to begin the process of creating the arboretum. A shelterbelt of about a dozen trees was planted in the Asian section in 1982. The two ponds were added in 1985, using designs made by the USDA Soil Conservation service. They were later enlarged and the islands were added, providing a small wetland area and a natural habitat for water fowl. Four hundred trees were planted and a water main was installed in 1985. In the fall of 1985 the members of Delta Tau Delta joined forces with the Arboretum Associates to plant 1,500 tulip bulbs in the flower bed at the north end and the first perennial flower bed was created to make the arboretum into an

ArborNotes

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arboretum and botanical garden. Unfortunately, neither the tulip bed nor the perennial garden exist today, only a few bronze ajuga and some yarrow survive.

The late 1980s saw a renewed interest in the care and development of the Arboretum as the University made preparations to celebrate its centennial in 1989. The grove of lilacs was initiated in 1987 with a group of European-derived lilacs.



The current view of the wedding site. The site has matured and developed to match the visions of Don & Elisabeth. May 12, 2006. Bill Bowler photo

This planting was sponsored by the Idaho State Federation of Garden Clubs as a commemoration of the Bicentennial of the U. S. Constitution. This and other lilac groves now include over 203 individual plants representing 112 different cultivars and species. The newest addition to the lilacs is the double pink flowering 'Spokane' lilac which was added in March 2006. Another of the projects was the planting of the Centennial Presidential Grove in 1988. One hundred oaks of 13 different species were planted along the eastern side of the Arboretum, one tree for each year of the University and one species for each of the 13 presidents who had served up to that time. As the wedding guests looked west towards the ASUI Golf Course on July 14, 1991, they saw a well tended lawn and a lot of very small trees.

During the 1990s there was a major, concerted effort to expand the plantings within the Arboretum. Single trees and groves have been planted honoring campus or local groups, as memorials to individuals, or as demonstrations of the support of the Arboretum. Beginning in 1994 and continuing through 2003, the Borah Foundation planted a tree each year to commemorate the theme of that year's Borah Symposium on the Causes of War and the Conditions for Peace. Each of the trees were selected by the members of the Borah Committee from a group suggested by Dr. Richard Naskali, Arboretum Director. Speakers for each of the symposiums participated in the tree plantings. Ten trees have been planted in the appropriate geographical region represented by the theme of the symposium. Collectively, these trees are known as the Borah Foundation Peace Walk.

Other significant plantings have been made which display plants by type or by their use in the landscape. The group-

downii' elms along the southeast border, planted in an arc to reflect those planted along the eastern entry drive to the Administration Building, are a memorial to Jason Kelley. Jason and his father were both UI graduates. Jason was a strong Vandal fan and his father remains one today. Several demonstration gardens have been added to the southern portion of the Arboretum. The

ing of nine 'Camper-

first of the daylilies for the Daylily Demonstration Garden were planted in 2003 in honor of George Dwelle. This garden is in the process of being designated by the American Hemerocallis Society as an official display garden. The irises and ornamental willows add more variety and color to the gardens. The Xeriscape garden and a collection of 50 heathers, arranged in groups by cultivar, are a demonstration of some attractive, water-wise perennial plantings that can be made in this area.

Throughout its history, articles about the Arboretum have appeared in The Argonaut, the University of Idaho student newspaper. The earliest dates to 1919 and describes the very beginning of the arboretum and nursery in 1910. The information in the articles about the Arboretum, notes that from its very earliest stages almost all of the funds used to develop the Arboretum are the results of grants, gifts to the Arboretum through the UI Foundation or donations through membership in the Arboretum Associates. Labor and equipment have been and are provided by university staff and students, especially the Director and Horticulturist for the Arboretum and the students who are employed there.

Someone who attended the Zinser-Mackin wedding in 1991 and who makes a return visit to the campus and Arboretum in 2006 will see a growing, developing, thriving and more inviting area. The Arboretum truly confirms the dream and potential seen by Dr. Hartung in 1977 and by Dr. Zinser in 1991. As Dr. Hartung noted in 1988, an arboretum is never finished, it is a gradual process. An arboretum and botanical garden is constantly changing and growing.

Integrated Pest Management

I is hard to remember now in 2006 when the acronym IPM was new to agriculture, or when the term integrated pest management was viewed with skepticism. Quite simply, IPM has become standard operating practice among farmers in the Northwest. In retrospect, we should not have been surprised. After all, who can disagree with the IPM approach, a common-sense strategy for pest control that combines alternatives to pesticides with judicious use of pesticides? And who can argue against the goals of IPM to manage pests in ways that minimize harmful effects of pest control action on human health and environmental quality, all the while maximizing profitability of control?

BENEFITS OF IPM: ten reasons to practice integrated pest management during 2006:

- Reduce production costs by making sure pest controls are used when needed;
- Maximize the effectiveness of pest control programs by better application timing;
- Increase profitability by using the best combination of control technology;
- Take advantage of native pest control agents already present in commercial fields;
- Avoid or delay pesticide resistance in weeds, insects, and pathogens;
- Reduce the hazards of pesticides to farm workers by substituting least-risk alternatives;
- Send an "I care" message to the general public about environmental stewardship;
- Maintain long-term quality and productivity of soil and other natural resources;
- Protect water resources from pesticide contamination; and
- Address consumer worries about food safety and pesticides.

How does **IPM** address these challenges? Integrated pest management deals with pests in the broadest sense for insects, mites, nematodes, pathogens, weeds, and vertebrates. This means, then, that by definition, there can be no single set of control practices that fits all situations, no "one-sizefits-all" recipe for IPM. Instead, the specific elements of pest management strategies can vary field to field, farm to farm, and year to year. Five general principles guide the design of any IPM program.

PRINCIPLE #1. There is no "silver bullet." There is no single best way to control any pest. Over-reliance on any method almost always has undesirable economic or ecological results. This is especially true for pesticides, where overuse leads to resistance, resurgence and replacement. What you can do in 2006: Consider all available pest control tools, especially crop cultural methods and biological controls. Combine several different tactics into an overall strategy that balance the strengths of each method against any individual weaknesses. One way to get started is to consult the 'Pacific Northwest Pest Management Handbooks for Diseases, Insects, and Weeds' online at http://pnwpest.org/. Faculty at Oregon State University, the University of Idaho, and Washington State University annually work together to revise these source books of IPM advice to the tri-state region.

PRINCIPLE #2. Treat the causes of pest outbreaks, not just the symptoms. Stop-gap control measures such as application of pesticides that kill pests after infestations occur do not really solve pest problems in the long-run. IPM instead focuses on preventing infestations from occurring in the first place. The idea is to change the cropping system in ways that take advantage of the weakest biological links in the pest life cycle. What you can do during 2006: Learn about pest biology, especially environmental conditions that limit pest invasion, survival, and increase. Design rotational schemes that either keep pests from establishing or that enhance natural checks and balance to keep infestations at low levels.

PRINCIPLE #3. Pest presence does not mean that there is a pest problem. Crops can tolerate infestations of many pests without any measurable loss in yield or quality, so keeping fields entirely pest-free seldom is necessary. IPM growers instead seek to reduce pests to levels that do not cause economic damage. What you can do during 2006: Only apply pesticides if pest infestations exceed action thresholds or similar guidelines. Thresholds ensure that the value of yield loss saved by taking control action in fact is greater that the costs of purchasing and applying pesticides. The University of Idaho Pest Management Center (*http://www.ag.uidaho.edu/pmc/*) lists thresholds for commonly encountered pests.

PRINCIPLE #4. If you kill the natural enemies, you inherit their work. Naturally occurring predators, parasites, pathogens, and other beneficial organisms, collectively called 'biological control agents', help keep many pest populations in check. What you can do during 2006: Learn to recognize common native biological agents. Protect natural enemies already present by avoiding broad-spectrum pesticides that can indiscriminately kill pests and beneficial organisms alike. A particularly useful printed identification guide is 'Beneficial Organisms Associated with Pacific Northwest Crops', available for \$3.00 at *http://info.ag.uidaho.edu/*.

PRINCIPLE #5. "Just-in-time" vs. "Just-in-case." IPM depends on pest sampling and forecasting methods that tell which pests and how many are present. Regular, systematic monitoring can help you schedule pesticide applications or

other control action exactly when needed, just-in-time to prevent imminent loss, rather than as just-in-case insurance sprays. What you can do during 2006: Regularly monitor every field for weeds, insects, diseases, and nematodes. To be effective, sampling must be far more than making casual observations. Decide if you have the time and training needed or better can hire these services. Keep permanent records of sampling data.

Ed Bechinski, Professor Department of Plant, Soil and Entomological Sciences University of Idaho

(Editorial Note: This essay, slightly modified, was published in the January 16, 2006 issue of the Lewiston Tribune and is reprinted with permission. Although it was initially written for farmers, its message applies as well for gardeners).

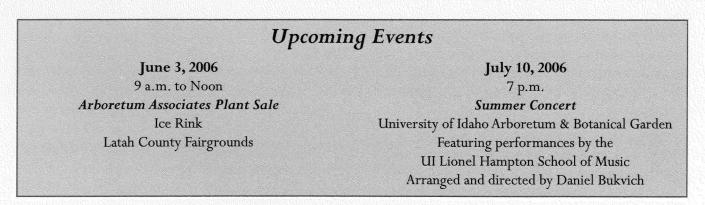
Arboretum Associates Funded Projects for 2006

The Arboretum Associates board recently held a meeting to decide on the budget for this calendar year. In addition to funding their regular activities, including publishing ArborNotes, updating the web page, sponsoring the summer concert, etc. they also agreed to fund some significant new projects in the Arboretum.

Perhaps the most visible of the projects is slated to be funded with proceeds from this year's annual Arboretum Plant Sale. Those funds will go toward repainting the Arboretum barn. The barn, built in 1908 will be painted 'barn red' to match the existing siding on the north wall. Please come out and support this worthy project at the Plant Sale on Saturday, June 3 at the Latah County Fairgrounds.

The other projects that were funded include purchasing plants and labels for a new 'Hosta and Asiatic Lily Walkway' that is currently being constructed alongside a new wood chip trail in the northwest corner of the Arboretum. The trail winds among the first trees planted in 1982 in the Arboretum. Those trees will provide the shade for the collection of Hosta, and Asiatic Lilies will be planted in the sunnier spots. The other major project will be the expansion of the gravel parking lot at the south end of the Arboretum. The plan is to expand the lot from its current 10 spaces to 25 spaces. The expansion will extend to the west on the flat ground, with a buffer strip left between Palouse River Drive and the lot for future plantings. The board also agreed to continue funding more automatic underground irrigation installations. All of these projects are funded with membership donations to Arboretum Associates. Your support for Arboretum Associates ensures these continuing developments .

Paul Warnick



ry Department, and

it had been named the "Liberty Grove".

It was dedicated

on Memorial Day,

1919. There was a ceremony in Me-

morial Gym after

which the grove

was dedicated, and

wreaths were placed at the base of each

tree. One thing that

I have not been able to find is a picture,

diagram, or drawing

of the newly planted

wise, of the area,

Historic Grove Gets New Recognition

was recently surprised to learn that there is an eightyseven year old memorial grove in the Shattuck Arboretum that has been largely forgotten for what seems to be as long as anyone can remember. The history of these trees was brought to my attention when I was shown an article from the 1927 *Idaho Forester* by C.L. Price (the nurseryman hired by Charles Shattuck around the same time the plaque: thirty-two casualties out of a total UI student body of only 650. I subsequently found in the UI library archives an Idaho Bulletin containing a program of the dedication services and pictures of each of the honorees. I came across some further information in various newspaper articles, which explained that the grove had been planted as a Campus Day project. The planting was supervised by the Forest-

arboretum was getting started). Price wrote about a memorial grove that was established in honor of the 32 University of Idaho students who lost their lives in World War I. He described the grove as being on the slope just south of the Administration Building about 150 feet away. Also according to Price, the grove consisted of ten red oaks and 22 conifers comprised of Norway spruce, Englemann spruce, and Colo-



Liberty Grove Oaks, Looking north toward the Ad Building March 10, 2006. Steve Nittolo photo grove. I and other-

rado blue spruce. Lastly, he told of a bronze plaque hanging in the Administration building with the name of each man to whom the trees are dedicated. I found this intriguing because I had never heard of such a grove and also because I had noticed some nice oak trees in that location.

Upon revisiting the area, I was surprised to find exactly ten oak trees well spaced on the slope Price described, as well as a number of spruce, although the spruce were of varying sizes and not as obviously part of a grove. The lack of definition of the grove and my curiosity to find out more about the planting of it started me looking for more information. Paul Warnick, the Arboretum Horticulturist, and other members of the UI landscape crew were also interested and joined in the search for more information.

One of the first things we found was the bronze plaque, which has since been moved to the North end of the Memorial Gym. The names of the fallen are inscribed on the and have not found a clear picture of the grove at the time of planting or shortly thereafter. Our research did turn up a few other facts as well as other memorials and plantings.

There were two other dedications in the Shattuck Arboretum over the years. One of these was a grove of blue spruce planted in commemoration of the two hundredth anniversary of the birth of George Washington. This grove was planted by members of Xi Sigma Pi, the forestry honors society, and consisted of one maple and nineteen spruce, one for each of the members of the group. It appears that there are only six remaining, located just southeast of the concrete steps leading from Rayburn St. to the arboretum amphitheatre. There was also a large boulder with a bronze plaque which is no longer present. This partial memorial emphasizes the need to document and maintain our historical trees. One other memorial in the Shattuck Arboretum is Price's Green, a spot south of the amphitheatre, which was made level with rock retaining walls and planted with grass.

This area was dedicated to C.L. Price who was responsible for planting many of the oldest trees on campus.

There is considerable history in the Shattuck Arboretum, some of it available for perusal and some unfortunately lost to our knowledge. We would like to consolidate whatever information we can find before it becomes more inaccessible. If anyone has any photographs or information of any kind, especially about the Liberty Grove, please call Paul Warnick, at the Arboretum office. For reference: At the time of the planting there was a large flower garden on the slope just South of the Administration Building. The Liberty Grove was planted southwest of the garden. There were several fir trees between the grove and the garden, which predate the grove.

As part of this year's Campus Day activities, a new entrance to the Arboretum trail system was constructed at the East end of the Liberty grove, just above the Old Administration Building Steps. Other ways of recognizing the commemorative nature of the grove are also being considered. I would encourage everyone to take a walk through the easternmost end of the Shattuck Arboretum and enjoy these historic trees.

> Steve Nittolo UI Campus Arborist

'Idaho Big Trees' in the Shattuck Arboretum

There is a national program for recognizing the biggest trees of individual species in each state. The Idaho program is administered by Dr. Ronald Mahoney, Extension Forester in the College of Natural Resources. The list is divided into native and cultivated trees. There are currently 50 cultivated trees recognized as the biggest in the state of Idaho, and 57 native trees. The list of trees and locations can be found on the UI Extension Forestry website, *http://www.cnr.uidaho.edu/extforest/*, along with forms and instructions for nominating a tree. There is also a link to the national list, which shows that there are 13

campus arborist, Steve Nittolo, and the UI Student Society of Arboriculture to identify and measure more big trees in the Shattuck Arboretum. So far, we have nominated four trees, American Beech (*Fagus grandifolia*), Incense Cedar (*Calocedrus decurrens*), European Silver Fir (*Abies alba*), and Spanish Pin Fir (*Abies pinsapo*). The Beech and the Incense Cedar are both from some of the original plantings in the Arboretum in 1910. The two firs are from plantings done after 1935 and no records have been found to give us a precise planting date. We are continuing to work on identifying and measuring more historic trees and I am sure there

national champions in the state of Idaho. The Giant Sequoia (*Sequoiadendron giganteum*) in the Shattuck Arboretum has been on the state list since 1975.

Over the past year I have been working with the UI

Idaho Big Orees
University of Idaho Arboretum
Is The Owner and Protector of the Following Idaho Champion Big Tree, as of This Date, the Largest of It's Kind Reported in Idaho
Fagus grandifolia American beech
Date: March, 2006 Dimensions
in circumference - 73 inches in height - 98 feet
1/4 average diameter of crown - 11 feet
Total Points - 182
Boralyharusen Kalluny
Dr. Steven Daley Laursen, Dean Dr. Ronald L. Mahoney/Director College of Natural Resources Idaho Big Tree Program

will be additions to the list, including Bigleaf Maple (*Acer macrophyllum*), European Mountain Ash (*Sorbus aucuparia*) and Balsam Fir (*Abies balsamea*).

Paul Warnick

Two Special Honors for Meriwether Lewis and William Clark

A swe celebrate the bicentennial of the epic 1804-1806 'Voyage of Discovery' by Meriwether Lewis (1774-1809) and Captain William Clark (1770-1838) and their valuable team, two western North American native plants are noteworthy because their genus names commemorate the team leaders. Although Bitterroot (*Lewisia rediviva* Pursh), the state flower of Montana, and Clarkia (*Clarkia pulchella* Pursh) were among the numerous plants

Today, Bitterroot plants persist in well drained grasslands, sagebrush plains from British Columbia to California, Washington, Oregon, Idaho, Montana, Colorado, Wyoming, and in very limited distribution in Alberta. To the best of my knowledge, there are no viable natural populations of *Lewisia* at Lewiston, Idaho. In his monumental monograph of the genus *Lewisia*, published in 2000, B. LeRoy ("Roy") Davidson described several named cultivars of Bitterroot and

collected on the Lewis and Clark Expedition, these two species are spectacular generic honors that persist in the native flora of Western North America.

Bitterroot (Lewisia rediviva)

Original Bitterroot specimens, collected July 1, 1806 near the Bitterroot River, Travelers' Rest, Missoula County, Montana, are preserved at the Academy of Natural Sciences, Philadelphia, PA. Initially this site was noted Clark's River; the original notation also stated "The Indians eat the root of this." *Lewisia* is in the Portulacaceae, the Portulaca family. Frederick Pursh, in his 'Flora Americae Septentrionalis' (1814) including descriptions of the Lewis and Clark plants, selected the specific epithet *rediviva* for Bitterroot to allude to the fact that renewed growth occurred on dried herbarium specimens.



Bitterroot flowers and a flower bud. Grantsdale Cemetery, Hamilton, MT. June 11, 2005. R.J. Naskali photo.



Bitterroot Flower. Grantsdale Cemetery, Hamilton, MT. June 13, 2005. R.J. Naskali photo.

described the species as having flower color forms which ranged from white, cream, pink, a deep rose, and even yellowish color. ("Roy" Davidson, who lived in Kendrick, Idaho for a period, published numerous essays about alpine plants during his lifetime).

Digging, cleaning, and even storing Bitterroot roots for human consumption has been practiced for centuries in parts of Western North America. In Montana, the Flathead and Northern Salish tribes still collect and trade the roots in annual rituals which are usually conducted in May. In spite of the fact that many original dense colonies of Bitterroot have been virtually eliminated by tillage, farming, and urbanization (e.g. adjacent to the University of Montana campus at Missoula), many special collecting sites are still used by Na-



Rosette of succulent leaves on a Bitterroot plant. December 5, 2005. R.J. Naskali photo.

tive Americans. It is unethical, even illegal, to collect these plants without authorization.

Lewisia rediviva plants typically are leafless at the time of flowering; after seed maturation, the plants are dormant in dry substrates. As late season precipitation and snowfalls begin, a rosette of succulent leaves grows during the fall and winter during cool and freezing weather. Frequently, the leaves have senesced before or shortly after flowering starts.

The culturing of Bitterroot plants is a great challenge to gardeners and might be left to accomplished rock-gardening specialists who are wise in the ways of container culture exploited in British-style troughs. In nature, Bitterroots thrive in lava fields (e.g., Idaho's Craters of the Moon), and rather stable, well-drained gritty or stony substrates in sunny xeric sites with little competition from other plants. Water-logged soils during the growing season in shady habitats guarantee failure. If you want to culture *Lewisia*, you should gain your skills with the many human-made hybrids of other species that are currently available from competent specialty nurseries.

To learn about the ethnobotany of *Lewisia rediviva*, see scores of them in flower, and purchase legally collected plants, attend the Annual Bitterroot Days in Hamilton, Montana, scheduled for June 10 and 11, 2006. Alternatively, see Jerry DeSanto's out-of-print stunning book. 'Bitterroot', 1993, 120p., ISBN 0-9637889-0-6, published by Lere Press.

Clarkia (Clarkia pulchella)

Plants of *Clarkia pulchella* are annuals which are rather laxgrowing. Common names include Ragged Robbin, Deer Horn, Elkhorns, Clarkia, and Pink Fairies; the first names here are in reference to the strongly forked, three lobed petals. *Clarkia* is in the Onagraceae family, which includes *Oenothera*, the Evening primrose. In contrast with *Lewisia*, Ragged Robbin plants can grow on somewhat unstable exposed soil banks of clay and/or loam.

The original plant of *Clarkia pulchella* was collected June 1, 1806 on the Clearwater River area, Camp Chopunnish, Kamiah (Idaho County), Idaho. (The river was then called the Kooskooskee). This original specimen, preserved in the herbarium of the Academy of Natural Sciences, Philadelphia, PA, has the original notation, "A beautiful herbaceous plant from the Kooskooskee & Clark R." In the original 1814 description, Frederick Pursh ('Flora Americae Septentrionalis') spelled the genus *Clarckia*, an error that has long-since been corrected. Pursh did, however, include a beautiful engraving of a plant with a flower and flower buds.



Ragged Robbin plant in flower. Winchester Grade, Idaho. June 24, 2004. R.J. Naskali photo.

The specific epithet, *pulchella*, is from the Latin for beautiful. The genus name is in honor of Captain William Clark.

Today, plants of Ragged Robbin are native in southern British Columbia eastward in Idaho, western Montana, and to southeastern Oregon. Fortunately, there are viable populations of *Clarkia pulchella* around Clarkia, Idaho! Does *Clarkia pulchella* grow natively in or around Clarkston, WA?

Plants of *Clarkia pulchella* should be easy to culture in a sunny spot in many gardens. Although seeds of this species are commonly advertised on the Internet, great caution



Ragged Robbin plants in flower. Winchester Grade, Idaho. June 24, 2004. R.J. Naskali photo.

is urged if you wish to have the original species in your garden. In my searches via the internet under '*Clarkia pulchella*' I found that several offer a double-flowered variant or cultivar which does not have the forked petals of the wild species.

For black and white photographs of the Lewis and Clark herbarium specimens, and an intriguing narrative about travels of the original specimens, see 'Herbarium of the Lewis & Clark Expedition', Volume 12, The Journal of the Lewis & Clark Expedition, 1999, University of Nebraska Press, Lincoln, NE, 357p., ISBN 0-8032-2931-3.

Richard J. Naskali

Annual Plant Sale Coming Soon

ark your calendar for Saturday June 3rd, 2006 for the Arboretum Associates Annual Plant Sale. The sale will once again fill the ice rink at the Latah County Fairgrounds. Doors open at 9:00 a.m. but if last year was any indication the crowd will be lined up and ready to go much earlier.

This years' sale will feature hostas, daylilies, fancy leaf geraniums, a large collection of unusual perennials including gas plant, assorted shrubs and lilacs. A selection of xeriscape and native plants will also be featured. This year we will also have some hand crafted concrete garden ornaments.

The proceeds from the sale will fund a bright new coat of paint on the historic arboretum barn.

This is a great opportunity to support the arboretum, fill your garden with beautiful plants, and spend a fun Saturday morning – See you there!



Arboretum volunteers finish working session and admire some of the plants for the upcoming sale. April 2, 2006. Marlene Johnson photo

Report from the Horticulturist

I thas been another unusual winter in Moscow (I think that has probably been said every winter since Moscow was settled!). It snowed in early December and stayed cold enough the rest of the month that the snow did not melt. Then in January it warmed up, the snow melted and we had an unusual amount of nice weather. February was colder and wetter than past years. Last year the Forsythias were nearly in full bloom in early March, this year they are hardly showing any color on the 10th of March and did not reach full bloom until late March.



New Hosta \Daylily Walk, March 21, 2006. Paul Warnick photo

The snow in December kept me inside working on accessioning all of the additions to the collection and updating the database. The collection now includes 9,137 plants of 1,871 separate taxa. The entire 104 page inventory of living plants in the collection can be viewed on the web at *http://www.uidaho.edu/arboretum/pdf/TotalInventory05.pdf*. I also worked on making accession labels for all of the new accessions and replacements for missing labels. January and February have been mild enough to work outside a lot of the time. Every year the amount of routine pruning increases. I constantly struggle with the conflict between allowing a tree to grow in its "natural" form and pruning to allow for clearance on roads and trails or mowing. I try to strike a balance between the two and try to keep the pruning as unobtrusive as possible.

We have also started to work toward some significant upgrades in the Shattuck Arboretum. We have been studying old records and identifying trees that were planted in the original plantings by C.H. Shattuck from 1909 to 1916. So far, we have identified 23 species of trees from the original plantings. I will order and install the 4x5" aluminum signs to identify those trees this spring. We have cleared competing volunteer seedling trees from around some of these original trees. Another goal of our work this winter has been to clear some designated paths through the Shattuck Arboretum. I plan to have a loop trail through the entire Arboretum cleared, leveled and covered with wood chips this year. The trail will include two new entrances, one at the west end coming off Nez Perce Drive and one at the east end, above the Administration Steps. The east entry will lead into the recently discovered "Liberty Grove".

The Arboretum Associates board has agreed to fund some significant projects in the University of Idaho Arboretum and Botanical Garden this year. An exciting new planting will be a "Hosta/Asiatic Lily Walk" to be planted along the new trail being constructed in the north west corner of the Arboretum. The Hosta will be planted in the shade provided by the oldest flowering crabapples and Tanyosho pines in the Arboretum, while the Lilies will be in the sunnier beds along the trail. The other projects we hope to complete this year are, painting the Arboretum barn, expanding the south parking lot, and continuing installation of more automatic underground irrigation. The Arboretum Associates board had agreed to use the proceeds from this year's Arboretum plant sale to fund the painting of the barn, so I hope everyone will come out and find lots of new and interesting plants for their gardens and support the painting project. I am grateful to all of our donors who provide all of the plants and fixtures in the Arboretum and also help significantly with maintenance and upkeep.

Paul Warnick



Annuals with arboretum barn September 16, 2005 Paul Warnick photo



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