

ARBORNOTES

A Newsletter of the Arboretum Associates

March 2017



PLEASE VISIT
OUR WEBSITE AT
www.uidaho.edu/arboretum

Inside this Issue

Strengthening Connections	1-3
Arboretum Associates 40th Anniversary Celebration with Art Show	3
Science Saturdays in the Arboretum	4
President's Message	5
Native Bees	6
16th Year of "Summer Breezes and Sweet Sounds" in the Arboretum	7
Calling All Artists	7
Arboretum Associates Donor Roll	8-9
Report from the Horticulturist	10-12
Arboretum Associates Plant Sale	12
Saving a Tree	13
Walter Buechler	14-15
Upcoming Events	15

Strengthening Connections: Linking the University of Idaho Arboreta to the UI Campus

The University of Idaho features two beautiful arboreta on its main campus.

The Shattuck Arboretum on the south side of the Administration Building was planted by Charles H. Shattuck in 1909 as UI added Forestry to its list of academic programs. Just 20 years old, the University had little landscaping, and the weedy slope was determined to be a great place to plant trials of different tree species to be used as a living classroom and research area.

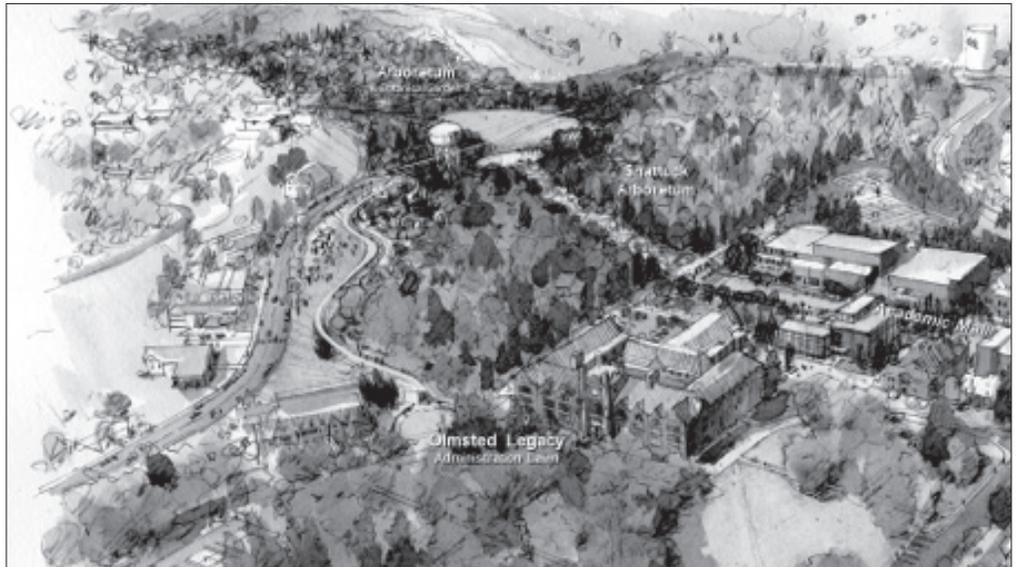


Figure 1: Aerial view of campus showing proposed arboreta and campus connections – Image by Stephanie Bower

The University of Idaho Arboretum and Botanical Garden, or New Arboretum, is located on 63 acres south of Nez Perce Drive, adjacent to the UI golf course. More than 5,600 named woody plants and trees, leisurely trails, flowering plants, and water features provide a peaceful reprieve for the plant enthusiast or casual visitor.

In 2012, the Arboretum Associates explored the notion of establishing some form of signage at the north end of the New Arboretum along Nez Perce Drive, noting that many motorists likely pass right by, unaware of this valuable campus asset. The conversation percolated for some time, and the effort was renewed in 2014 with a consultant, Robert Zimmer of Zimmerray Studios, hired to assist the University in developing planning concepts related to a 'north entry' to the New Arboretum.

Come Grow With Us

ArborNotes

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

Published by
ARBORETUM ASSOCIATES
University of Idaho
875 Perimeter Drive MS 3143
Moscow, Idaho 83844-3143

President
Kris Roby

Vice-President
Bill Bowler

Secretary
Sally Greene

Treasurer
Joy Fisher

Past President
Jan Leander

Members-at-Large
Paul Anders
Kayla Casey
Terry Gray
Nancy Sprague
Dave Tank

Arboretum Horticulturist
Paul Warnick
875 Perimeter Drive MS 2281
Moscow, ID 83844-2281
Phone: (208) 885-5978
arboretum@uidaho.edu

Emeritus
Arboretum Director
Richard J. Naskali
615 N. Eisenhower St.
Moscow, ID 83843
Phone: (208) 882-2633
naskali@uidaho.edu

MARCH 2017

During the course of conversations among Arboretum stakeholders, three broader planning concepts emerged which went far beyond the thought of a mere north entry:

1. Physically and visually 'knit' the old and new arboreta. This could be accomplished through additional plantings, and the narrowing of Nez Perce Drive.
2. Connect the arboreta to the historic core of campus at the Administration Lawn. This could be accomplished by expanding the footprint of the arboreta to include the bare portion of I-Tank Hill and providing a footpath across this hill to the historic Administration Building steps.
3. Connect the arboreta to the Academic Mall of campus by thinning/removing trees in a north-south swath through the Shattuck Arboretum; possibly provide a switchback path up the slope to the I-Tank.

These concepts were subsequently shared among a broader collection of Arboretum stakeholders and the campus roundtable leadership team, and were met with general enthusiasm. Given the prominence and value of the arboreta to the wider campus and community, a presentation was made available to the public online. We also conducted broad public information sessions, seeking wider public feedback on these concepts. Sessions included a short presentation with an overview of the concepts and sharing of key images.

Raymond Pankopf, Director of Architectural and Engineering Services, and Brian Johnson, Assistant Vice President, Facilities shared the presentation at the annual Arboretum Associates meeting on April 13, 2016. This session, conducted at the 1912 Center, was the largest of the sessions conducted, with over sixty people in attendance.



Figure 2: Nez Perce Drive, looking east with future plantings 'knitting' the two arboreta together – Image by Stephanie Bower

Online visitors and attendees at public sessions were invited to share their thoughts through an online survey. Nearly two hundred people took part in the survey and, in general, survey respondents were supportive of the concepts proposed. Table 1 provides a quick summary of the feedback.

	Support %	Neutral %	Don't Support %
Link arboreta to main campus	84.6	5.1	10.3
Link arboreta through new plantings	83.1	6.2	10.7
Link arboreta through narrowing of Nez Perce Drive	46.4	17.9	35.7
Expand arboreta to include I-Tank Hill and a trail to historic Administration steps	84.6	7.2	8.2
Extend Academic Mall through a visual opening of Shattuck Arboretum	60.8	21.1	18.1
Include a switchback path through Shattuck Arboretum	68.1	18.0	13.9

Table 1: Survey responses

The greatest number of concerns shared centered on the potential impacts to general traffic and congestion as well as negative impacts to parking opportunities due to the potential narrowing of Nez Perce Drive.

In looking ahead, the University looks to incorporate these broad planning concepts within the Long Range Campus Development Plan, and expects to share these same images with the Board of Regents when providing an update of the Campus Master Plan in the spring of 2017.

— Brian Johnson

Arboretum Associates to Celebrate 40th Anniversary with Art Show on April 12th

Please mark your calendars and join us on Wednesday, April 12, for the 40th Annual Meeting of the Arboretum Associates. The special event will be held at the 1912 Center and the public is invited. There will be a reception and viewing of community artwork between 6:00 p.m. and 7:00 p.m. followed by the annual business meeting. The keynote speaker will be Aaron Cordell Johnson, plein air artist of Moscow, speaking on, “Inspired by Nature.”

Hors d’oeuvres will be served and there will be a no-host bar. If you are an artist or photographer, please consider submitting a piece for the show. See the article “Calling All Artists” for more information about the art show.

We want to recognize all of you who have served on the Board of Directors for Arboretum Associates or the Arboretum Advisory Board/Executive Committee. Please e-mail Kris Roby at kristineroby@gmail.com with your name, position or positions held on the board or boards and the years you served by April 10, 2017.

Looking forward to seeing you on April 12th!



Terry Gray photo

Science Saturdays a Big Success in Year Three

Fun-filled outdoor science opportunities for the whole family continued this past summer at the Arboretum. This free public outreach program, in its third year, brought top-level predators, aquatic creatures of Lilliputian dimension, and our beloved chitin-clad pollinators to the fore. Science Saturdays combines the excellence of local science educators with the perfectly suited outdoor classroom of the Arboretum and typically serves families with children age 1-10.

On June 18, the WSU Raptor Club brought their team of owls, hawks, and educators to the Big Red Barn. In front of the backdrop of streamside willows, Gus the great gray, Widget the barn owl, Amicus the golden eagle, and other club resident birds of prey showed off their distinctive predatory features to a crowd of nearly 50 people. Participants observed hooked bills and sharp talons, the most obvious tools of these top-level predators. They also learned how wing shape and tail length loom large in importance and provide visible clues to the habitat type for which each animal is best suited. Broad wings serve for soaring while proportionally long and narrow wings allow for the quick turns needed in a forested environment. Participants enjoyed snacks and tested their new knowledge with a feather and egg matching game at the conclusion of the program.

In the second Science Saturday event of the summer, held on July 23, educators Heather Huston and Cait McHugh of the Palouse Clearwater Environmental Institute invited participants to explore the amazing world of aquatic macroinvertebrates through a puppet show, game, and pond

exploration. Participants shared their favorite insect and then learned about several common macroinvertebrates and their metamorphic life cycle. This process was illustrated with dramatic fanfare through the “insect life puppet show.” Best of all, participants got their hands wet and dirty as they took to the field, or pond rather, to explore the pond ecosystem with nets, magnifying glasses, buckets, collection jars, field guides, and dichotomous keys. They learned to use these tools of the trade to sample and identify insects and went home with their very own dichotomous key.

Busy, Busy Bees zoomed into the Arboretum for the last Science Saturday of the summer, held on August 18. Katie Peterson, PhD Student in the Department of Biological Sciences at the University of Idaho, invited participants to find out what makes an insect an insect and to learn about the importance of pollination through a song, game, and flower observation. Peterson is currently studying how certain spider species colonize unique islands of habitat known as “kipukas” in Craters of the Moon National Monument in southern Idaho. Participants learned about phenology and the great diversity of pollinators potentially present at the Arboretum. They simply had to spin around and cross the bridge to experience the John and Winifred Dixon Butterfly Garden. A diversity of milkweed (*Asclepias*) species and other perennials, as well as annual blooms, welcomed the observers. As an added bonus local naturalist and Arboretum Associates board member, Terry Gray, treated both children and adult participants to field identification of some local lepidopterans (butterflies).

All in all, Science Saturdays 2016 was a success in both quality and quantity. Applications for the 2017 program are due March 31, 2017.

—Will Boyd



Maureen Taylor Regan, former Arboretum Associates Board President showing a snowy owl at Science Saturday – Sylvia Petersen photo 6-18-16



Science Saturday – Sylvia Petersen photo 8-13-16

Message from the President

I am honored and happy to be back on the Arboretum Associates Board and serving as President for the next two years. I work with a terrific group of Board members who are knowledgeable, talented, fun and passionate about the Arboretum. I took over from Maureen Taylor Regan after the annual meeting in April, 2016. Maureen was a dedicated Board member and served as Vice President, Interim President and finally as President and we appreciate everything she did during her tenure. I also want to thank Amy Ross-Davis who served as Secretary for the Board, but recently moved with her family to Oregon. Amy was the inspiration behind the successful Science Saturdays in the Arboretum. Many thanks also to Ron Mahoney and Dan Johnson for their service on the Board.

Kudos to Paul Warnick, Arboretum Horticulturist, for receiving the 2016 University of Idaho Outstanding Employee Award. Paul and his staff go way beyond their job descriptions to keep the Arboretum expanding and looking gorgeous throughout the year.

Our new Facebook page has been popular and calls for a shout out to Terry Gray and Paul Warnick for keeping it fresh with beautiful photos of the Arboretum. Please “like” us on Facebook at Arboretum Associates. The Science Saturdays in the Arboretum were well-attended this past summer and I want to recognize Will Boyd, Chair of our Outreach and Education Committee, for his oversight of the programs. Thanks to Cort Northrup for agreeing to Co-Chair the Plant Sale Committee with Jan Leader for the 2017 Plant Sale.

This year marks the 40th Anniversary of the Arboretum Associates and we are looking forward to a special annual meeting. We hope you will join us. Be sure to see the articles on the annual meeting and “Calling All Artists.”

A hearty thanks to our members at all levels who contributed to the Arboretum Associates this past year. We also appreciate contributions to the Centennial Endowment fund and to special projects in the Arboretum. If your membership has lapsed, please use the membership form on the back of ArborNotes to renew. You can also make your gift on-line through the Arboretum or University of Idaho websites.

On my recent walk in the Arboretum, I was reminded how beautiful it is in all seasons. It was bitter cold, but a sunny day; the snow was deep and the trees shimmered with hoar frost. I didn't see or hear any birds, squirrels or rabbits but the stillness that enveloped me was remarkably soothing. As I left, the mist rolled over the white hills toward the Arboretum and the sky to the east turned a rosy pink with purple wisps. It is a magical place any time of the year. I am grateful to all who for the last 40 years have contributed to making the University of Idaho Arboretum and Botanical Garden a very special place for everyone on the Palouse.

— Kris Roby



Terry Gray Photo

Science Saturdays Call for Proposals

We are seeking groups or individuals who are interested in designing and delivering a one-hour program in their area of expertise geared towards school-age children to be presented in the University of Idaho Arboretum and Botanical Garden on one of the following Saturdays: June 17, July 15, and August 12.

Please email sciencesaturday@uidaho.edu for more information.

Arboretum Provides Habitat for Native Bees

Have you ever stopped near the John and Winifred Dixon Butterfly Garden or near the Idaho native plants section and just listened, especially from the spring through early fall? If you have then you probably know where this is going. If you have not, then it is recommended that you do. When you stop to listen, you realize there is a low humming emanating from the plants. Upon closer inspection, you would notice the many different species of pollinating insects foraging for food amongst the plants. The pollinating insects that you could see are butterflies, wasps, flies, and of course bees. Some of the bees that frequent the flowering plants of the Arboretum are the European (or Western) honey bee. These are the domesticated bees we learned about in grade school that live in a colony with a queen bee and all of her worker bees that do a little jig to let the other workers know where to find the food. However, there are more than 150 native bee species that could also be present. Native bees are generally eusocial or solitary type bees, which means they do not form colonies like honey bees. Some of these species may nest in the same general area, but each female bee lays her own eggs in her nest and then provisions the nest with pollen and nectar for the larvae to feed on when they hatch. Due to their non-colonial nature, native bees have not been domesticated and “kept” by humans in the way that honey bees have been. These bees include groups such as the large

bumble bees, carpenter bees, mason bees, leafcutter bees, sweat bees, and my personal favorite - metallic bees. All of these groups of bees include many bee species and within each group there is a varying degree of social behavior and association with each other.

Native bees are more efficient pollinators than honey bees in general; they just do not exist in as large of numbers. Native bees get up and going earlier in the day, forage later in the day, and can forage in harsher weather conditions than the honey bees. Bees pollinate plants that are needed for human food such as almonds, cherries, apples, and many others. For these reasons we should try to develop and manage habitat that is beneficial to native bees, which benefits honey bees as well. The Arboretum functions as a great source of forage for native bees. Sections such as the butterfly garden and native plant section maintain high pollen and nectar producing native plants that the native bees require. Other less manicured parts of the Arboretum and the Shattuck Arboretum provide the nesting habitat solitary bees need. Solitary bees can use many things for nesting sites such as dead twigs and branches, bare soil, and dead thatch from plant materials of seasons past. In this way both Arboretums work together to not only maintain plant species and varieties but also habitat that protect the many fascinating species of pollinating insects.

— *Allen Casey*
USDA-NRCS Plant Materials Center



Bumble and Metallic Bee on Blanket flower – *Kayla Casey Photo*



Honey Bee – *Kayla Casey Photo*

“Summer Breezes and Sweet Sounds” Concert Delights Crowd

The 16th “Summer Breezes and Sweet Sounds” Concert drew an appreciative crowd on Monday, July 11, 2016 in the UI Arboretum. A rainy Sunday made the planners and musicians a little nervous, but Monday was clear and the sun came out in the afternoon to create a beautiful, warm evening. The annual event is sponsored by the UI Lionel Hampton School of Music and the Arboretum Associates. Since the beginning, the principle organizer of the concert has been University of Idaho Distinguished Professor Daniel Bukvich, an internationally known composer and conductor, and Director of the Jazz Choir. Bukvich produces an eclectic program performed by talented musicians who include faculty, emeriti faculty, students and community members.

Concertgoers poured into the Arboretum for the 7:00 p.m. concert, making their way to the Watts Grove at the north end of the upper pond. Surrounded by beautiful Norway spruce trees and song birds, it is an idyllic setting for an open air performance.

Three new compositions by Daniel Bukvich started the program – *Clavé*, based on the Afro-Cuban rhythmic pattern of the same name, was performed by nine members of the Percussion Ensemble; followed by *Diatonic Fanfare* (2016) for trumpets; and *Sing Alleluia!* performed by the Chamber Choir.

Other pieces ranged from a string quartet playing Hayden’s *Concerto in C, Allegro*, to three Klezmer (Yiddish) songs performed by members of the local group Gefilte Trout, and a piece for two tubas. A favorite of the crowd was Bukvich’s *Silence is an Illusion* (2014). It is a mysterious, beautiful piece about auditory ghosts narrated by David Billingsley and performed by the Chamber Choir and the Percussion Ensemble.

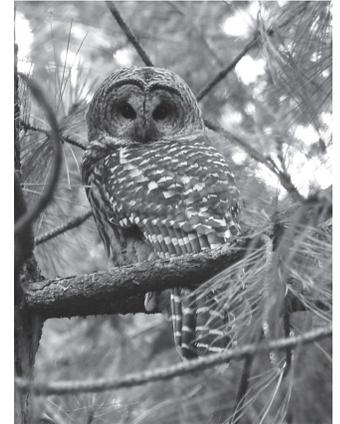
Finale, written by Bukvich specifically for the 16th summer concert, was the final piece incorporating all the musicians and singers. Bukvich and the performers were cheered by the audience for the talent and passion they displayed throughout the evening.

Many thanks to Paul Warnick, Arboretum Horticulturist, and his staff for transporting people to and from the concert site. We look forward to another wonderful concert on Monday, July 10, 2017, and hope you will join us.

— Kris Roby

Calling All Artists

Heart of the Arts, Inc. and the Arboretum Associates are looking for residents of the Palouse to create new artwork for the 1912 Center’s April 2017 hallway gallery show “Four Seasons in the UI Arboretum.” This show will highlight the beauty and variety of flora and fauna at the University of Idaho’s Arboretum throughout the varied seasons and will also showcase the artistic talents of our local community members in honor of the 40th anniversary of the Arboretum Associates.



Barred Owl – Terry Gray photo

Interested parties should create art in any media that reflects the theme “Four Seasons in the UI Arboretum” and make sure that the pieces are ready to display and have the ability to be hung on a wall. Artwork of all sizes will be accepted but only limited space is available for 3D pieces, so please check with the 1912 Center in advance for the size of those display areas. Artwork will be accepted for entry on Monday, April 3, 2017, from 9:00 a.m. to 6:00 p.m. in the 1912 Center office (located on the East end of the building; inside the Senior Center). Work entered into the show may be available for sale and 10% of the proceeds will be donated to the Arboretum Associates for future work maintaining the University of Idaho Arboretum for the community.

All ages are encouraged to participate in this community show. The Arboretum Associates will hold an opening reception for the community at their annual meeting to be held in the 1912 Center Great Room on April 12, 2017. The winning artwork will be used in future issues of *Arbnotes*. For more information about Heart of the Arts, Inc. and the 1912 Center find us on Facebook or the web at www.1912center.org. Also feel free to contact Jenny Kostroff at (208) 669-2249 or email her at 1912center@gmail.com to learn more about the hallway gallery in the facility.

If you want to see pictures of the Arboretum, Terry Gray is willing to share his Flickr Site at: www.flickr.com/photos/terryandchristine/albums/72157624535599931

— Kris Roby

Arboretum Associates Donor Roll

Thank you to the many generous donors who supported the University of Idaho Arboretum and Botanical Garden from July 1, 2015 to June 30, 2016. A total of \$47,900 was received from membership gifts, gifts for endowments that support the Arboretum, and gifts to support specific Arboretum projects. Your support makes a difference.

Life Associates

Elna & Elbert Barton
 Judi Beck & Tom Alberg
 Bert Bowler
 Ben Bowler
 Wilma & Edd Bowler
 John Burlison
 Ronald Carlson
 Sharon Christoph & Christopher Davidson
 Roberta & Charles Graham
 Alma & David Hanson
 Patricia Jordan
 Jean & Roger Korus
 Jan & Dick Leander
 Norma Lewis
 Louise Luce
 Makiia & Chris Lucier
 Judith Marineau
 Luz & Albert Merkel
 Moscow Rotary Club
 Richard Naskali
 Marcia & Rob Parish
 Raven Trust Fund
 Teita & Tom Reveley
 Melissa Rockwood
 Nancy & Garth Sasser
 Maguerite Smiley
 Ruth & Myrl Stearns
 Robert N. Steele
 Jeanne & Ray Steinhoff
 William Stellmon
 Ellen Thiem
 Lauren & David Wenny
 James White
 Doris Williams
 Jaki Wright & Bill Bowler

Fiscal Year 2016 Membership Gifts

Life Associates

Ellen Thiem
 David & Lauren Wenny

Helen & Monte Boisen
 James & Susan Calvert
 Linda & Duane Char
 Edmund Chavez
 Lawrence & Karen Chinn

Sponsor

David & Rebecca Knapp
 Judith Marineau
 Eugene Thompson

Mary Clancy
 Jill & Raymond Dacey
 Mark & Gail DeSantis
 James & Kathryn Dunn
 Douglas & Robin Finch

Patron

Warren Bowler
 Davidson Farm
 Robert Dwelle
 James & Lucinda Fisher
 David & Rhonda Gaylord
 Karla Harman
 Elinor Michel
 Lucinda & William Morrow
 Shirley Rencken
 Robert N. Steele
 Greg & Linda Teske

John & Barbara Foltz
 GE Foundation
 Mary & Archie George
 John & Sandra Goffinet
 Christine & Terry Gray
 Willard & Ann Harwood
 Alice Hennessey
 Herron DuPree Fund
 Charles & Andrea Horgan
 Crawford & Joan Judge
 Janice & Darrell Kent
 Larry & Joanne Kirkland
 Walter & Betty Kochan
 Michael & Martha Kyte
 Richard & Jan Leander
 David & Nancy Lee-Painter
 Barbara McKean
 Nancy & Reid Miller
 Northwestern Mutual Life Foundation, Inc.
 Lawrence & Marjorie O'Keeffe

Donor

Anonymous
 Cheryl & William Ardrey
 Diane Armpriest
 Robert Bird
 Alane & Roger Blanchard

Darla & David Port
 Donald & Maureen Taylor Regan
 Beverly Rhoades
 Lorin & Florence Roberts
 Susan Roberts
 Roger & Carise Rowley
 Dan & Martha Schmidt
 Paul & Teresa Scott
 Philip Shinn
 Nancy & William Sprague
 Kathryn Swenson
 The Schwab Charitable Fund
 Dorothy Thomas
 Martin & Julia Trail
 UI Retirees Association, Inc.
 Steven & Mary Ullrich
 Donna Vincenti
 Susan Zenier

Sustaining

Louise Avery
 Shelley Bennett
 Elisabeth Berlinger
 Nilsa Bosque-Perez
 Elizabeth & Thomas Brandt
 John & Susan Byrne
 Steve & Sally Davidson
 Tonie & Gary Fitzgerald
 Ron & Jo Ellen Force
 Sally Greene
 George & Joan Klingler
 Roger & Jean Korus
 Bonita Lawhead
 Thomas & Carolyn Leege

Corinne Lyle
 Julie Miller
 Cortland Northrop
 Joyce & Duane Parr
 Patricia & James Peek
 Annette Pettenger
 Kristine & Rodney Roby
 Joanne Sutton
 Thomas & Jeanette von Alten
 Grace Wallace

Active

Lois Bellis
 Carol Blackburn
 Teresa Boykin
 Pamela Brunsfeld
 Building Blocks Child Care Center Inc.
 Paul & Anna Conditt
 Margaret Conrad
 Brian Dulin
 Steve Geidl
 Gavin Giraud
 Rebecca & Patrick Hayes
 Lawrence & Justine Landes
 Christine Mallon
 Jan & David Rauk
 Amy Ross-Davis
 Marina Savenkova
 Jerry Schutz
 Deborah & Charles Stenkamp
 Jeanette Talbott
 Robert & Brenda Tribelhorn
 Diane Walker

Eric Anderson
 Mollie & Ben Beckler
 Patricia Bowen
 Carolyn Bowler
 Warren Bowler
 David & Carlotta Boyd
 City of Moscow
 Jessie Clark
 Ray & Jill Dacey
 Wilma Daniels
 Rhett Diessner
 Ron & Jo Ellen Force
 Christine & Terry Gray
 Robbi Hamida
 Donna Hanson
 Sarah Koerber
 Randy Luten
 Gordon & Alice Merritt
 Elinor Michel
 Donald & Maureen Regan
 Dudley & Laura Reiser
 Susan Roberts
 Kenton Bird & Gerri Saylor

Gifts to Arboretum Endowments

Karen Batroukh
 Deborah & Marc Crichton
 Alfred & Bonnie Janssen
 Elinor Michel
 Nancy & William Sprague
 Robert N. Steele

Gifts in Support of Projects

Report from the Horticulturist

It has been another interesting year in the Arboretum. This is the first year I had an all female crew. Patricia Porter returned for her third summer in the Arboretum and was joined by two students, Darby Turnbull and Sylvia Petersen.

As often happens, the project I dreaded the most turned out to be less stressful than expected. During the summer of 2015, we discovered a large outbreak of Mountain Pine Beetle in the Shattuck Arboretum. The infested trees had to be removed before the next generation of beetles emerged in June of this year. We quickly determined that the scope of the job was way more than I could handle with my limited expertise and crew. We decided it would be best to find a logger who could saw the trees down and haul the logs off. After contacting several people and getting three bids, we accepted a bid from Casey Leachman. Casey said he could do the job in two days and actually finished with time to spare. They cut nearly 50 trees and skidded them out to an open area where they were stacked until a self loading logging truck came in and hauled out two full loads of logs.

They were hauled to a small mill in Viola and milled into lumber that is now being sold by Wasankari Construction in Moscow. Most of the logs were infected with 'Blue Stain Fungus' which discolors the wood, making it unsaleable as standard lumber, but that same blue stain is prized by some contractors and decorators, actually making the wood more valuable to some people. I understand that the lumber has been used on several local projects here, and was even used to build a bar in a new restaurant in Seattle. Everything went remarkably smoothly, although there were interesting moments trying to figure out how to squeeze big pieces of equipment into the confined spaces of the Shattuck. I am pretty sure it was the only time two fully-loaded logging trucks drove past the Administration Building. It is also surprising how little visual impact the logging caused. I would guess that most people have no idea anything happened. It did open up a view into the Shattuck Arboretum from the west a little more, which makes the Giant Sequoia show up more, but most people would be hard-pressed to find where all fifty trees had stood.



2nd Load Of Logs Leaving – Charles Zillinger photo 4-20-2016

Our other big project for the year was an installation in the Beth Bowler Hosta Walk at the top of the Arboretum. The original inspiration for the project was an article in the *Hosta Journal* showing a Hosta display garden using galvanized culverts as containers. Jan Leander, a long time Arboretum Associates Board member, sent me pictures of their new backyard project using culverts as raised beds. Bill Bowler, another long time board member and the sponsor of the Hosta Walk, is a retired Architecture professor. He has used galvanized metal extensively in his own home, so I figured I could count on his support for the idea. He had also mentioned to me once that he had temporarily grown a big green Hosta in a pot inside a tall Sono Tube to mimic a palm tree.

All of this happened about the time that Joy Fisher (a very long time Associates Board member and treasurer) lost her husband to cancer. After Doug was diagnosed, Jan and Dick Leander were working on their culvert project. Doug loved their idea, and the Leanders had procured a 5' diameter piece for Doug to use in his yard. Doug was a great lover of anything to do with water and beaches, so some kind of a memorial using the culverts and involving a palm tree seemed like a great fit. Bill provided a selection of all blue-colored Hostas to represent water in the four shorter culverts and a large division of the cultivar 'Jade Cascade' for the palm tree. Then, with some help from the University machine shop to make the culverts' sharp edges safe, and some creative irrigation engineering to get drip irrigation installed in all the pipes, we were able to get it installed. Come visit this creative garden honoring a long time friend and supporter of the Arboretum.

In August, the Arboretum Associates Board provided funding for me to go on a tour with the American Conifer Society to see Giant Sequoias and Bristlecone Pines in California. Both were awe-inspiring in different ways, and I highly recommend the trip to anyone. As a bonus, I received seeds from the California Bristlecones, which fairly recently were determined to be a different species than the Rocky Mountain Bristlecones which occur further east from Nevada into Colorado. We have some nice Rocky Mountain Bristlecones (*Pinus aristata*) in the Arboretum, but none of the California species (*Pinus longaeva*).

We also received several other interesting groups of plants that will eventually be planted out in the Arboretum. A representative from Harvard University's Arnold Arboretum came to Idaho in August 2015 to collect seeds of Idaho native trees to add to their collection. I was able to go along for two of the days, and in return for my help, they shared some of the plants they have raised from those seeds.



Casey Leachman skidding logs out of the Shattuck Arboretum – Ken Dola photo



Doug Fisher culvert project – Paul Warnick photo 7-29-16



Mountain Pine Beetle trap Shattuck Arboretum – Sylvia Petersen photo 5-27-16

They sent 24 plants of ten different species of Idaho trees and shrubs. I envision an 'Arnold Arboretum Idaho Grove' somewhere in the Western North American section of the Arboretum.

Another interesting group of plants came from a serious plant collector in Boise. Walter Beuchner, a native of Switzerland started collecting different willows from around the world more than 30 years ago. In the early 1990's he met Dotty and in 1993 moved to the US and married her. Then he moved most of his collection from Switzerland to Boise. His collection now includes over 120 different species of willows and he has begun sharing them with us. He brought ten different species up to Moscow this fall, including two from Africa and one from Argentina (our first documented woody plant from the Southern Hemisphere!). See profile on page 14.

Arboretum Associates Annual Plant Sale 2017

The 2017 Arboretum Associates plant sale will be held Saturday, May 20th, in the ice skating pavilion located at the Latah County Fairgrounds complex. The doors open at 9:00 AM and close at 12:00 noon. As always, there will be a wide array of interesting plants available for purchase including plants propagated from the Arboretum and the Xeriscape Demonstration Garden. Shoppers will find a variety of perennials and annuals to choose from for both sunny and shady areas of the garden. The Hosta lovers among us will not be disappointed as there will also be an impressive selection of the shade-loving plants ranging from the giants to the minis.

The sale is a significant fund-raiser for the Arboretum with proceeds over the years being used for enhancements to the Arboretum, including a fresh coat of paint for the red barn and bike racks at each entrance. It has evolved into a wonderful social event that ushers in summer and provides gardeners the opportunity to find new and unique plants or old favorites that never fall from style.

There are many factors that contribute to the continued success of the sale. Paul Warnick and his staff propagate and nurture the plants through the winter and early spring months so they will be ready for our gardens as the warm months draw near. An army of energetic volunteers make

We added about 390 new plants to the collections this year. Please remember that all of the plants and other assets in the Arboretum (labels, kiosks, benches, etc.) are gifts to the University. The Arboretum is only possible due to the generosity of private individuals, and I am very grateful for their support.

— Paul Warnick



Chipping slash from the logging project – Paul Warnick photo 5-10-16

this one-day sale possible. Volunteers manage table set-up, plant-hauling and set-up, customer service on sale day, and they clean up at the end. Finally, and most importantly, we have wonderful customers who return every year to enjoy the festive nature of the event and the opportunity to find rare and exciting plants, while supporting the University of Idaho Arboretum and Botanical Garden.

Right now, while you are thinking of it, please mark your calendar for the upcoming 2017 plant sale – Saturday, May 20th, 9:00 – 12:00 noon.

— Jan Leander



Asher Carbonneau draws the 2016 winning raffle ticket – Joy Fisher photo

Saving a Tree

Fairly frequently, trees are damaged by wind in the Arboretum. This is partly due to the unusual topography which can cause wind to do funny things, and partly due to the fact that generally Moscow is not subjected to lots of high winds. Trees in other climates (like much of southern Idaho) are hit with much more frequent winds, and have to adapt to survive. Here in Moscow, we often get a few significant wind storms each year as the seasons are changing, but we rarely get sustained winds that blow for more than a day.

On September 20, 2016 we were working on removing the floating weeds from the upper pond when I discovered a badly damaged Silver Linden (*Tilia tomentosa*). When I find a tree split that badly, I normally get out the chainsaw and remove it. However, this tree would leave a significant hole, and it also posed some difficult challenges to access and remove it. I went to David Rauk, the campus horticulturist, and Ken Dola, the campus arborist, and asked them if they thought there was any way to save it. We have actually saved five other trees in the Arboretum with large splits, but none this big and none this hard to access. The big challenge was figuring out a way to pull the split parts back together. Once the split is pulled together, it is a relatively simple procedure to drill through the trunk and bolt it. After climbing the tree to attach ropes to each side of the split, Ken used an amazing array of pulleys and ropes, zig zagging between three other trees to reach the road. Once out to the road, he hooked onto a 4-wheel drive truck and pulled the rope tight enough to get the two sides together. Then we drilled through the trunk, ran a threaded rod through the trunk in four places and bolted the trunk back together. The final touch was spray painting the bolts with Duck Dynasty camouflage paint to minimize the shiny metal.

This is the sixth tree we have bolted during my years in the Arboretum, and so far all of them have survived and continue to be assets to the collection. Ken did a great job of engineering to figure out how to get the trunks pulled together and we managed to save another significant specimen.

— Paul Warnick



Split Silver Linden — Paul Warnick photo 9-21-16



An elaborate pulley system is put in place — Ken Dola photo 9-21-16



Split trunk on the Silver Linden pulled back together — Paul Warnick photo 10-4-16



Bolts installed in the Silver Linden — Paul Warnick photo 10-4-16

Walter Buechler

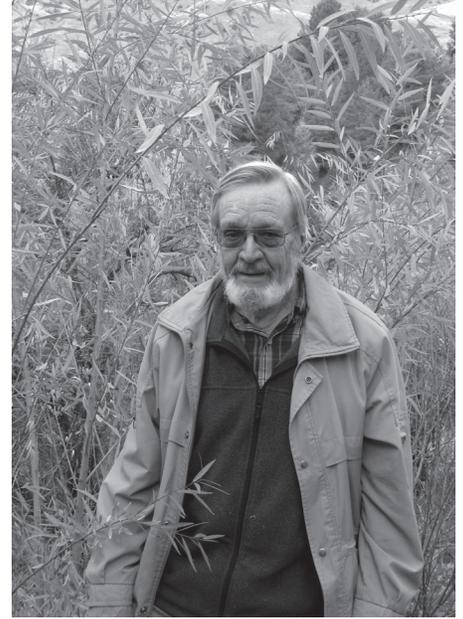
Walter Buechler has been cultivating and working with willows for almost 40 years, becoming familiar with hundreds of species. A retired engineer, Walter has published his research on *Salix* genetics and has collected many species from around the world. His contributions concerning hybridization, and the influence of climate on leaf venation, have been published in peer reviewed journals and presented in symposia.

This interest in willows began innocently enough. In 1979, Walter was asked by a friend if he would lead a landscaping project for a public park in his hometown in Switzerland. Walter suggested planting willows along the waterway.

“What kind of willows?” the Waterway Protection Agency wrote back.

The question, while simple enough to ask, was far from easy to answer. After being referred from one botanist to another, and being told that “*Salix* is a very difficult genus,” Walter got in contact with Heinz Oberli, an expert in willows. Oberli had a living collection of nearly 600 willows from

all over the world. When Oberli died a few years later, Walter continued to help maintain that plantation, and to organize its plant register and Oberli’s fossil collection. Walter was taught how to perform chromosome counts by a geneticist at the Swiss Federal Institute of Technology, and was able to use this technique on the Oberli collection.



Walter Buechler standing by *Salix acmophylla* a willow from Egypt that he has shared with the Arboretum – Dotty Douglas photo 11-29-16

The genus *Salix* represents one of the most diverse groups of woody plants, including trees, shrubs, and trailing plants. While commonly



Walter Buechler’s willow collection in Boise, Idaho – Dotty Douglas photo 11-28-16

used in watery landscaping projects, there are a number of issues that people may not be aware of when adding these plants to their property.

Willows require a lot of water, and should be grown where they can access either flood irrigation or dip into the water table. This can become expensive in cities where city water is used for irrigation. They also tend to grow rapidly, and species in the *Longifoliae* subgroup of willows may sprout where people may not want them due to root systems that can travel up to 30 feet. This can be a problem for landscapers who like strict control over what grows where. The root systems also can grow into pipes and other underground lines, clogging them. At the same time, willows are fast-growing, which makes them extremely attractive to gardeners who want to get a jump-start on their designs.

After meeting his future wife at a willow symposium in Scotland, Walter married and relocated much of his collection to Boise, ID, which was a monumental undertaking. The cuttings, ranging from one to four feet in length and a half inch in diameter, were first fumigated in Switzerland to kill insect eggs. He then received them in New York where the USDA lab tested for any surviving eggs. He transported them to Boise and kept the cuttings in quarantine pots for a year before planting them in their desired locations. With a success rate of about 80%, the process needed to be repeated two times before he had all the plant species he wanted. Over half of Walter's willows came from the original Oberli collection, with the rest collected by Walter himself in Europe and the U.S.A.

Some of Walter's research in genetics has contributed to the forestry program at the University of Idaho. He has also been working with the Canadian Museum of Nature on a Chromosome Atlas of all worldwide *Salix* species, information that he hopes will one day be included in a general treatment of worldwide *Salix*, underway at the Royal Botanic Gardens, Kew in the UK.

— Paul Warnick



Calendar of Upcoming Events

APRIL 12, 2017

Arboretum Associates Annual Meeting

Wednesday, April 12 6:00 pm – 8:30 pm
1912 Center, 412 E 3rd Street, Moscow

The 1912 Center's April 2017 hallway gallery show will highlight the beauty and variety of flora and fauna at the University of Idaho's Arboretum throughout the varied seasons and will showcase the artistic talents of our local community members in honor of the 40th anniversary of the Arboretum Associates.

MAY 20, 2017

Arboretum Associates Annual Plant Sale

9:00 a.m. to 12:00 noon
Palouse Ice Rink, Latah County Fairgrounds

JULY 10, 2017

17th Annual "Summer Breezes and Sweet Sounds"

Free Concert in the Arboretum
7:00 p.m. Bring your blankets and lawn chairs

SCIENCE SATURDAYS

June 17, 2017

July 15, 2017

August 12, 2017

University of Idaho

Arboretum Associates
875 Perimeter Drive MS 3143
Moscow, ID 83844-3143



PRESRT STD
U.S. POSTAGE
PAID
UNIVERSITY OF
IDAHO

Renew your annual contribution to the Arboretum Associates for Fiscal Year 2017 and contribute to your favorite project fund. Contributors receive our periodic ARBORNOTES. Please mail your tax deductible contributions to: Arboretum Associates, University of Idaho, 875 Perimeter Drive MS 3147, Moscow, ID 83844-3143.

OR Renew your annual contribution using the secure University of Idaho online gift form. Go to uidaho.edu/giving/make-a-gift and search for "Arboretum Associates" when selecting a fund.

Thank You!

Name _____

Address _____

City _____ State _____ Zip _____

Fund Contribution

Arboretum Associates \$ _____

Centennial Endowment Fund \$ _____

Other _____ \$ _____

Total Contribution \$ _____

MEMBERSHIP CATEGORIES

Active \$20 - \$49

Sustaining..... \$50 - \$99

Donor \$100 - \$249

Patron..... \$250 - \$499

Sponsor \$500 - \$999

Life Associate \$1,000 and above

Please charge my: MasterCard VISA

Card# _____

Expiration Date _____

Signature _____

0001Z