

Iowa Bonsai Association Newsletter

www.iabonsai.org

<https://sites.google.com/site/cedarrapidsbonsai/>



April 2021

Volume 77, Issue 3

From the Editor

Happy repotting and collecting, Bonsai enthusiasts! The Spring of 2021 is upon us. Depending on your winter storage situations and the species of trees in your collection, you may be deep into the repotting process. Others have just begun. Collecting season should open in a week or two, as the ground thaws and buds begin to swell. This month, Noah Butler has provided an informative article on Needle Cast. I have a story for you about planting on natural wood slabs. In addition to Timely Tips, I have a little piece on that critical aspect of slab planting – Muck.

AND, NOW, INTRODUCING NEWSLETTER CLASSIFIEDS. Is there something you need? Do you have something you want to trade, sell or just give away to a happy home? Send me your adds! Bonsai related ONLY, please! I'm kicking this off in this issue with a little request of my own!

AS YOU REPOT AND COLLECT THIS SPRING, PLEASE TAKE PICTURES OF YOUR PROJECTS AND SEND THEM TO ME WITH A PARAGRAPH OR TWO (OR MORE, IF YOU WANT) ABOUT THE PICTURES. We want to feature club member activities in this Newsletter!

Remember that prior Newsletters are available on the Iowa Bonsai Association website, www.iabonsai.org There's a lot of good information there.

Susan Daufeldt

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Obituary Notice - Ivan Watters

Ivan Watters passed away at the end of February after a brief illness.

Ivan Watters was 85 years old. He lived in Highwood, Illinois. Ivan began studying Bonsai in 1960. He trained with several Japanese Masters. In 2006, Ivan became the curator of the Bonsai collection of the Chicago Botanic Gardens. Ivan co-authored the book *Bonsai: A Patient Art* and retired from the Gardens in 2014. Since then, Ivan has worked as a teacher, a guest judge at bonsai exhibits and as member of the Midwest Bonsai Society Board of Directors. His accomplishment in designing bonsai trees are reflected by many First Place and Best in Show Awards. In 2015, the Japan America Society of Chicago presented Ivan with its Cultural Achievement Award.

In lieu of flowers donations to the Midwest Bonsai Society, PO Box 1373, Highland Park, IL 60035 are appreciated.

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From the IBA and EIBA Presidents

IBA

Good morning and welcome to Spring. This last winter seemed to be longer and colder than any I can remember. I'm sure it was partly due to the isolation caused by the pandemic but whatever the reason, I'm glad Spring is here. I've begun the repotting of my trees, as I'm sure many of you have. If you need help with any of your trees don't hesitate to reach out.

Got some good news on club meetings. Starting May 15th, we will resume our monthly meeting at the Greater Des Moines Botanical Gardens. The meeting locations have changed so please check with the front desk for meeting locations. Masks will be required.

The IBA will be doing another Bonsai for Beginners class at the GDMBG in June so if you're interested in that please contact the garden and get registered.

The Iowa Bonsai Association is accepting donations of used copper wire. If you have copper wire that you cut off your bonsai trees and want to donate it to the IBA for reclamation please contact Scott Allen at scott@vividpix.com or 515-480-4437. Scott will be making a trip to the recycle center at the end of April.

Also...It's time to renew your membership.

What does IBA membership offer you?

- Access to events, including monthly study groups and workshops (club and professional designers) throughout the year where you'll get hands on experience.
- Access to experts, who not only help you keep your plants alive, but guide you toward making them living works of art.
- Horticultural knowledge and specific information that is pertinent to caring for bonsai in our area of the country, which really can't be obtained from reading books.
- Ability to display your bonsai at our Spring and Fall exhibitions as well as the Iowa State Fair Bonsai Show.
- Camaraderie and enjoyment that comes with joining a non-profit group with those who have similar interests.
- Wire for shaping your trees (aluminum).
- Quality tools for sale at reasonable prices.
- Bonsai soil for sale at bulk prices.
- Club Auction.
- Club website (<http://iabonsai.org/>).
- And most importantly, developing friendships with other individuals who can help you with your bonsai when you go on vacation!!

Hope to see you all soon!

Scott

EIBA

A big thank you to Jennifer Price for an interesting look at Bonsai in Europe and the United States! It was exciting to see how the natural environment is influencing the Art in different parts of the world and sparking a departure from traditional styling and material.

If you haven't had the opportunity to pay your dues yet, you can send dues or donations to our club Treasurer: Jim Rajtora, 3512 Sue Lane NW, Cedar Rapids, IA 52405. Checks should be made out to "EIBA."

April 8, 2021, 6:30 pm: EIBA Board Meeting via Zoom. The link will be sent out the Monday or Tuesday prior to the meeting. Please contact me by phone prior to the meeting if you think you have not received the link.



Scott Allen, IBA President



Susan Daufeldt, EIBA President

April 15, 2021, 6:30 pm: Club Meeting Via Zoom (The Link will be sent out on the Monday or Tuesday prior to the meeting):

Discussion of Thoughts, Ideas and Questions Generated by Jennifer Price's Presentation at the March Meeting.

**Bonsai Soil Presentation: Components, Purpose, Variations According to Use;
Open Discussion: Club Soil and/or Components Available to Members Now and in the Future**

Activities for the Coming Year: Club Member Input

The April Meeting is an important one in terms of planning! PLEASE attend if you possibly can! In order to make the most of our resources and time and provide you with the best club experience possible, we need your input!

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Name that Tree

**What kind of tree is this?
(Answer on page 9.)**



Timely Tips

Susan Daufeldt

Spring is here. Conifers that have been wintering inside should be outside now soaking up the sun. But Note: If they were overwintered in a heated space, they may be far enough along that they should come back in if temperatures drop below freezing. It is always a good thing if deciduous trees can break out of doors and in the location where they will be spending the growing season. However, as for conifers, once deciduous trees have begun to come out of dormancy (watch for green buds), you should get them back inside if temperatures drop into the low 30s. In my garden, deciduous that are not fenced must come back in at night because of the rabbits. At this time of the year, the rabbits will chew on any twig that has life in it. In my experience, conifers are rarely affected by the rabbit scourge. In determining when trees can be left out, regardless of weather, I watch the trees that are in the ground. If my bonsai are farther along than those trees, I bring them in if low temperatures are expected.

As outdoor temperatures rise, bonsai and pre-bonsai trees wintering outside and in unheated garages will begin to come out of dormancy. If your trees are protected and packed in a shaded area, pay attention and

be prepared to get them out into the sunlight as soon as the mulch around them thaws.

If you have trees in indoor winter storage, your repotting season is well underway. Keep those recently repotted trees out of the wind. Even if your trees have not been repotted, spring is a windy season and trees that did not require water for weeks indoors may dry out in a matter of hours once they get outside. Watch your trees water needs. If you can't check on them during the day, you may want to water in the morning before you leave home.

When to repot or collect a tree: Generally, when the tree begins to show signs of coming out of dormancy. Watch for green buds on deciduous trees, growing tips on junipers. If deciduous trees have leafed, it is probably too late, though there are some species that can tolerate a late repotting or transplanting.

A few thoughts on fertilizing:

- It is traditional and recommended that we do NOT fertilize trees that have been repotted or collected for the first month after repotting or collecting.
- It is generally recommended that initial fertilizing in the Spring should be mild. Most people begin with a fish emulsion fertilizer.
- Consider your purpose when determining when to start fertilizing. If you are growing or developing a younger tree, you may want to get right at it once the tree begins to break. If the tree is older and more refined, you will want to wait until it is just hardening off its spring growth (Hagedorn). Fertilizing older, refined bonsai too early and/or too much will result in long internodes on deciduous trees and undesirable juvenile growth on aged conifers.

Noah's Arc of Learning

Noah Butler

Article 3: Pining for Better Health

I am indebted to the University of Iowa and University of Maryland Extension Offices, as well as Ryan Neil at Bonsai Mirai, for the valuable information they provided concerning the identification and prevention of pine needle cast.

Needle cast on pines is very common. Less common is an understanding of where this infection comes from and how to formulate a plan of action regarding treatment and prevention. Although infections occur initially in the spring, the effects of needle cast are generally not obvious until late summer or fall. Given this timeline, it seemed reasonable to cover this topic early in the growing season so club members can take steps to prevent needle cast!

The vast majority of needle cast infections are caused by one of three distinct types of fungi, including *Dothistroma septosporum*, *Lophodermium seditiosum*, and *Mycosphaerella pini*. The good news is that the methods to address the core problem are the same for all three species. All pines can be infected and suffer badly from needle cast, but the most susceptible tree species are ponderosa and Austrian pines. Japanese black and red pines, Japanese white pines, and Mugo and Scots pines exhibit a slightly greater degree of resistance.

Fungi have complicated life cycles that consists of a dormant spore phase and an active growth phase. Fungal spores on your juniper germinate (hatch) when temperatures remain close to or above 50 F and humidity remains high. The fungi grow and change their appearance and hyphae (long filamentous branches) are produced. These hyphal extensions will burrow into delicate new growth on plants, sucking up nutrients as they continue to divide and increase their abundance.

Identification

As noted above, evidence of needle cast will generally only show up later in the summer and fall. Infected needles will present with yellowing at the needle tip and a sharp yellow and black band in the middle of the needle (Fig. 1). Sometimes sap will emerge at the black band leaving a white residue. The sap indicates that fungal spores have erupted and burst open the needle in that location. When needles are heavily infected and very badly suffering, yellow/browning discoloration may extend from the band to the tip of the needle (Fig. 2).



Fig. 2. When needles are heavily infected, yellow/brown discoloration may extend all the way from the band to the distal tip.

Photo credit:

University of Massachusetts Extension Office.

needle banding also could be nutrient deficiency, so it is important to determine if the problem is truly a fungal infection or whether it's a nutrient problem. To distinguish between these possibilities, consider whether the banding and discoloration is either spread across the entire tree or whether the banding is present on both young and old needles and has been there for the duration of the growing season. If either of those two options fit your scenario, then the issues are more likely to be nutrient related. On the other hand, if you observe that some areas of the tree are perfectly healthy and the banding is isolated to specific regions, or if the banding appears in an uneven distribution pattern, then it's very likely to be a needle cast fungal infection. It's also worth noting that needle cast is most common on lower branches, because either rain or watering from above will wash the spores (Fig. 3) from the upper canopy and deposit them on the lower branches. Spores are also spread via wind and handling.

Treatment, Prevention and Recovery

Unfortunately, organic approaches are not particularly effective against needle cast. That said, if you don't currently have a needle cast issue in your garden, then you would be wise not to introduce pines into

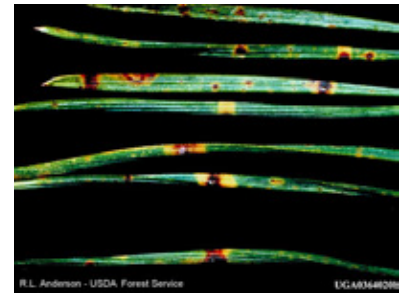


Fig. 1: Characteristic yellow and black bands at or near the center of older needles. Needles rupture and spread new spores from the white residue in the center of the band. Photo credit: University of Maryland Extension Office.

Unfortunately, once you see needle cast, there is really nothing that can be done to "cure" the infected needles. Don't pluck or cut off the infected needles! The pine needs to move water and generate sugars and these needles are still photosynthesizing. Older, year two and year three needles are likely to show evidence of banding first. Those needles will eventually die and fall off the tree. But here is the kicker: the banded, older needles got infected either last year or the year before! Younger, newly emerging needles will almost never show signs of needle cast, even though these needles are the most susceptible to initially getting infected in the spring.

An important consideration is that



Fig. 3. Fungal spores on young needles can be observed with magnification.

Photo credit:

Iowa State University Extension Office.

your collection that exhibit signs of this disease. You should rotate tree so affected areas receive more sun. It's also worth reiterating that there is no treatment for the infected needles. Just leave them alone. The treatment plan is directed at protecting new needles from becoming infected (by spores released from the older, banded needles) until they have time to harden off and form a waxy, protective cuticle.

The most effective agent to combat the fungus is Daconil® (Fig. 4), which you can pick up at any garden center or home center. Daconil® is superior because it is thick and it coats young, emerging needles and protects them until they form their own natural defense (the waxy cuticle). Start in the early spring when temperatures stably hover around 50 degrees F and treat every 7-10 days until the needles harden off, which generally occurs by late-May/early-June. It is also advisable to rotate Daconil® with another fungicide spray, and Bonide® copper-based fungicide 811 Copper 4E is another effective option. My research has also turned up evidence to support the use of systemic fungicides, which are taken up by the roots and distributed to all parts of the tree through the vasculature tissues. If you choose to use a systemic, the recommendation is for Cleary® 3336 granular lawn fungicide. However, our bonsai are not lawns, so some caution should be used when selecting the appropriate dose for your potted pine trees. This is another reason why I default to spraying Daconil® and Bonide® (aside from the fact that the Cleary® 3336 product comes in 80 lb. bags for your lawn. Yikes! Too much for me).



Fig. 4. The best measure to limit needle cast invasion of fresh spring needle growth. Applications should continue until needles mature and form their own protective waxy coating by early summer.

Three additional notes: 1) Remember, old infected needles and the spores are not affected by these fungicides. You'll be spraying to protect the young needles; 2) If you have multiple pines in your collection, it is important that you do not handle the foliage of multiple trees when they're wet, as this can transport spores (that stick to your hands) from one tree to another; and 3) if spraying Daconil®, make sure none of it gets on nearby spruce trees, as Daconil® is highly toxic to spruce.

In summary, dealing with needle cast really comes down to preventing the new spring needles from becoming infected by the spores released from the older infected needles with yellow and black bands. After a few growing seasons, the older infected needles will die, fall away, and become replaced by new growth. When the tree starts to produce robust new needle mass, then you know you're coming out of the woods, but this could take as much as 18 months. This is a long-term fight. But hang in there!

I hope this information on needle cast proves useful for those of you cultivating pines. If you have questions, comments or requests for clarification, please let me know. I would also be happy to also hear suggestions about topics for future articles. Contact me at, noahsullivanbutler@gmail.com.

Planting on Old Wood "Slabs"

Susan Daufeldt

From the very beginning of my life with Bonsai, I wanted to plant trees on slabs. Stone slabs are a common thing in the Bonsai world and there are ceramic equivalents, as well. But this is east central Iowa and stone

is not a common aspect of the nature I see around me on all sides. An so, from the very beginning of my life with Bonsai, I wanted to plant trees in wood. Not the sort of wood that you get from the lumber store – the sort of wood that you find in The Woods – remnants of old trees or parts of old trees, worked on by weather, insects and other natural forces. For lack of a better term, I call this “Old Wood” in order to distinguish it from, say, lumber.



Eastern Red Cedars Collected in 2014 and planted directly into this “Old Wood” “Container.”



Red Oak on Wood, Spring 2020

In those earliest days, in the absence of instruction, I plucked some little trees out of the ground and planted them directly into a piece of Old Wood that came out of a stream bed on an Iowa farm.

As it turns out, this is not a new idea; only, perhaps, a new application. Andy Smith of Golden Arrow Bonsai has a page on his website devoted partially to Rocky Mountain Juniper Driftwood Slabs for making Phoenix grafts.

<http://www.goldenarrowbonsai.com/driftwood-slabs-pg-10.html>, See, page 10. “To make a Phoenix graft, a young, flexible tree is inserted and grown into a groove carved into a piece of driftwood.” Id. At the Chicago show, August of 2018, Andy had a small pine planted on wood for sale at his booth.

Over the years, I have continued to experiment with this idea. Here are some of my observations:

- Trees seem to like old wood. It is not too different from putting them in a wooden box.
- Wood has a slightly drying effect, which helps prevent trees from getting too wet. The caveat here is that old wood may not be a good choice for water-loving species.
- It is critically important that the piece of old wood is hard. You cannot successfully plant a tree on an unstable surface. If there is spongy wood or the wood is falling apart, you will not be able to use it without doing considerable and probably fatal damage to the tree.
- Some wood (Juniper, for example) is highly rot resistant and, therefore, better suited to this usage.



Pine on Wood, Golden Arrow Bonsai.

One of my experiments involved an old crab apple that was manifestly unwell. The tree was poorly during the 2017 growing season and half of the tree died that summer. I treated it twice with a peroxide and water drench and the remaining portion of the tree struggled on. In the Spring of 2018, I had a decision to make. I decided to try this tree on Old Wood. When I removed the tree from its pot in March of 2018, the soil was very wet and there were a lot of dead and rotted roots. I removed all of rotted and unhealthy roots and prepared a piece of old wood for planting. This piece of wood had a natural depression and a hole in the center. I drilled holes for wire, added screen, and a layer of Double Redline bonsai soil.



Preparing the "Slab"



I spent considerable effort orienting the tree on the wood, added more soil and tied it in. I built up a muck wall in places to hold soil. Where the wood fell away at one end, I used a method I had seen Todd Schlafer use at a workshop: Rather inexpertly, but effectively (as it turns out), I used wire and long fibered sphagnum moss to create a fence to hold the soil. Once the soil was added and thoroughly chopsticked in, I covered the entire surface with soaked long fibered sphagnum moss.

*Midway
Through the
"Repot."*



The tree did well through the 2018 growing season and very well in 2019 and 2020. It received only the most minimal pruning during that time – it rested and enjoyed its situation. It regained health and vigor and this Spring, I repotted this tree. The remains of the old wood, came away from a healthy root system. The tree itself is healthy and preparing to bloom.

Old Wood seems to be a good thing for trees and I continue to look for likely pieces of planting slabs. I am currently experimenting with the use of PC Wood Hardener on Old Wood to see if it will lengthen the life of the slabs and/or make a slab viable that otherwise may be too unstable to use for this purpose.

*Crab on
"Old Wood,"
Spring 2018*



If any of you have any projects involving "Old Wood," I'd love to hear about them!

Muck

Susan Daufeldt

If any of you are doing slab plantings this spring or are considering them for the future, I thought I'd throw out some options. Muck recipes abound. You can even buy it pre-made now, if you just need a little and don't want to go to the trouble of making your own. Here are some options:-

Michael Hagedorn

1/3rd Akadama fines, 1/3rd Sphagnum Moss, 1/3rd Cornstarch Gel (Made by cooking down cornstarch in water).

Todd Schlafer

Sphagnum & Akadama (small Akadama soaked and crushed into a paste, mixed with wet, long fibered Sphagnum). The addition of more Sphagnum, woven in during the construction of the wall creates a really good environment for root growth.

Susan Daufeldt

Clay out of the ground, long fibered sphagnum moss and water.

Premade Muck:

Super Muck (1 gal)(\$35.00) (Premade Muck available on Ebay from Bonsai Learning Center)
Ingredients: Michigan peat, Akadama dust, long fiber sphagnum moss

Muck-O (2 lbs @ \$9.47 + shipping)(Premade - Superfly Bonsai)
Ingredients: Michigan Peat, Long Fiber Sphagnum Moss, Akadama

Name that Tree

Answer: Slippery Elm (*Ulmus rubra* a/k/a Red Elm) is native to eastern North America, ranging from southeast North Dakota, east to Maine and southern Quebec, south to northernmost Florida and west to eastern Texas. *Wikipedia*. This is NOT the same species as the American Elm (*Ulmus americana*). This tree is widely available here in Eastern Iowa. The deadwood is a typical feature. It is fast growing, small leaved, comes back better than ever after defoliation. In short, it is EXCELLENT bonsai material.

If you have the opportunity to collect these trees, do it!

Email me at: scdaufeldt@icloud.com.



I am returning to this same spot every week. On the morning of February 18, 2021 at 7:07 AM Central Standard Time, I was driving to Pella. I drove into the parking lot looking over Red Rock lake (see location indicated on the map). As I pulled in, I was listening the radio station, 96.3 Iowa Public Radio out of Pleasantville, Iowa.

I was listening to, *Funeral March of a Marionette*, by Charles-François Gounod. Listen on You tube if you wish. I challenge anybody over 55 years old not to think about Alfred Hitchcock!

<https://www.youtube.com/watch?v=LefsSwV4zlw>



Bonsai Classifieds

WANTED: Opportunity to collect Autumn Olive (*Elaeagnus umbellata* a/k/a Autumn Berry). If you know of a place where I could collect some Autumn Olive, please contact Susan Daufeldt, sdaufeldt@icloud.com, sdaufeldt@daufeldtlawfirm.com, (319) 430-3822

FOR SALE: At our greenhouse DaSu Bonsai Studio, 27887 Timber Rd., Kelley, Iowa we have sixteen varieties of companion plants stock coming in!! Should arrive this Wednesday or Thursday. Ten percent off to Bonsai Assn. members with a \$100 purchase. Come get some crushed lava for your planting needs and take some very cool miniatures home!

FOR SALE: Seedlings will be available at the farm/greenhouse. I have asked for a May 10th ship date (our average last frost date here). Should arrive before the end of the week. I have ordered: 100 Washington Hawthorn for sale \$2.50 each, 50 Malus Baccata Crabapple for sale \$2.56 each, 50 Nanking Cherry for sale \$2.80 each. I will also be offering grow bags (one and 2 gallon size) for growing out in the ground and developing your seedlings. \$2.00 and \$2.50 each per bag. As an incentive free lime sulfur will be given away with a seedling or other item purchase. BRING YOUR OWN CONTAINER TO BE TOPPED OFF or bring a four ounce dark colored bottle with tight fitting lid. Washington hawthorns immediately make great little forests. The other two items are probably best grown out in the ground or a larger container. Bring buckets to fill or waterproof bags for any of our 22 tons of bonsai lava, \$9 per five gallon bucket. Call 515-769-2446 if you have questions or need directions, and/or requests that you would want ready/reserved for pickup. Dave at DaSu Bonsai Studio.

FOR SALE: Pumice \$30 for five gallons. Akadama \$32 per bag, \$30 for members. BioGold fertilizer from Japan, \$92.50 per 5kg bag Contact Scott Allen or Tim Peterson

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