

TIMBER TALK

Newsletter of the Iowa Woodland Owners Association

Summer, 2003

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Summary, June 7, 2003 Board Meeting

The IWOA Board of Directors met at Marion, IA, June 7, 2003. The meeting was called to order by Vice President George McClain, with Directors McClain, Ulfers, Hansen, Hendricks, Miner, Sparks, Woodruff, and Twedt present. Also present was Steve Pennington of the Iowa DNR.

The current treasurer's report was reviewed and approved. We continue about a \$10,200 net worth.

The Iowa State Horticultural Society sent a copy of "The Iowa Horticulturist." They request a link to our web site, a copy of our membership database, and that IWOA become a member of ISHS. The secretary will complete the paperwork for a non-commercial affiliate membership and advise regarding the web site status. We will offer to send ISHS information to our membership through our communications channels rather than send our membership database.

Thank you notes were received from the Rockford fossil and prairie group for our donation for use of their facility for the 2002 annual meeting, the FFA for our contribution, and the American Tree Farm group for our donation to the woodlands managers program.

Secretary Woodruff reported that we did not receive about 10 membership renewals sent between 2/5 and 2/10. He advised those affected to resend if the checks did not clear or to contact him. Woodruff mentioned that progress on the web site has been slow, and he will be reviewing another avenue at ISU. In addition he reported that Tree Finder Guide sales have been brisk. Joe Hansen has agreed to chair our nominating committee to find candidates for three 2004 Board members. He also reported that 99 surveys on the Forest Reserve Program have been returned.

Cathy Wilke-Tomes' membership report showed a decline of 67 members to a current membership of 425. Several charter members did not renew. Another renewal notice will be sent.

Greg Twedt reported that the summer field day will be June 27th in Mt. Pleasant. He indicated that there were already 15 responses. Registration materials were sent out two weeks ago.

Steve Pennington represented the DNR. He brought us up to date regarding legislative issues. None of the State Nursery or Forest Reserve bills survived. REAP payments were restored. CRP sign-up periods were extended.

Hansen attended a State Fair kickoff meeting. He hopes to continue our partnership with the ISHS or the Tree Farmers. The theme for the State Fair this year is "One in a Million" and each booth is encouraged to build on the theme.

The Board voted unanimously to co-sponsor the Trees for Kids program with a contribution of \$300.

Hendricks passed out a draft of the September 20, 2003, annual meeting agenda that he and John Walkowiak have developed. The meeting will be held in Warren County at the Annett Nature Center.

Ulfers reported on the FFA awards program. Complementary memberships will be given to the winners.

Twedt reported on his successful use of "Escort" for controlling honeysuckle and multiflora rose. Because of the cost and quantity that must be ordered, it may be something IWOA gets involved with for the benefit of members.

The next Board meeting will be held Friday evening, September 19, at a location near our annual meeting.

2003 Annual Meeting

Mark your calendars. The 2003 IWOA Annual Meeting will be held at the Annette Nature Center in Warren County near Indianola on September 20, 2003. The theme for the meeting will be "Forestry Positives for Water and Wildlife."

Tentative plans call for morning sessions on woodland game management, women in forestry, attracting wildlife diversity, farm pond management, and bobcats. The afternoon tours will

include tree improvement, invasive plant management, and water quality.

The final schedule and arrangements will be mailed to members at a later date.

Forestry Extension Forestry Field Day

Call it luck or just great planning, the Forestry Extension Field Day will be held in Warren County on September 19, 2003, the day before IWOA's annual meeting. IWOA member Gary Harman the owner of Walnut Ridge Tree Farm will be hosting the event.

The field day will be held at Walnut Ridge Tree Farm at the north edge of Indianola. Registration will start at 12:30 and the program at 1:00. Topics for the day include production of Christmas trees, management of black walnut plantations, and viticulture. At 3:30 there will be a tour and tasting of wine at the Summerset Winery.

If you have questions or are interested in attending, call Gary Harman at 515-961-6979.

State Fair Booth

Volunteers are needed to staff the IWOA booth at the Iowa State Fair. Dates for the fair are August 7 - 17. Each volunteer is given admission tickets and a parking pass for the day. Please contact Steve Hansen if you are interested in helping. He may be reached by phone at 515-279-9654 or by email at Shansen516@aol.com.

Non-Native Tree of the Quarter

Yellow Buckeye *Aesculus Flava*

Yellow Buckeye is a native of the southeastern United States with a range as near as southern Illinois. It was previously identified under scientific name *A. octandra*, and you will still see it identified as such (as the Iowa Arboretum does). The tree is fully hardy in Iowa.

I think it can be most easily described by comparing it to our native Ohio Buckeye. Both trees have palmate compound leaves with 5 leaflets. They look about the same to me. Yellow Buckeye may have more leaf veins. They can grow 75' high or more (Ohio 35'-40'). They grow with a spreading crown (Ohio more upright). Their flowers are yellow with a hint of green (Ohio light green with a hint of yellow). The fruit is the familiar buckeye, but the seeds are typically larger, as are the pods which are as much as 3" across. The husks are smooth, not prickly, like Ohio Buckeye. Both trees have good fall color of pumpkin-yellow. The Ohio Buckeye may be more colorful but the yellow buckeye changes later in the fall.

I first encountered Yellow Buckeye at the Iowa Capital grounds about 1995. I had to look it up. I knew it was weird because of the smooth seed pods. There are several 30'-40' trees, two of which are across the street south of the capital. When I first encountered the trees, you could pick seed by standing on the ground (I'm taller than the average kid), but the state now has them trimmed too high. You now must wait for them to hit the ground (most will be eaten or too dry to plant), or do as I do, and use my secret seed picker, which is made out of a golf ball retriever with a small rake head attached. This extends to about 12'. I usually pick a couple of 5 gallon buckets of seeds still in the husks. This keeps them fresh until I plant in November. Buckeyes are not likely to germinate if they are dried out (as indicated by wrinkling). I could show you a couple dozen trees all grown from seed. The tallest 2 are approaching 10' and flowered for the first time this spring. I have hundreds more growing on the CRP land.

I can't think of a catalog that lists this tree, so I guess you'll have to see me or get to the capital grounds before me, but take a long pole. In case you're wondering, this picking is legal but you can expect stares. I tell people who ask that I'm weird but harmless (except possibly to squirrels).

Tom Brady IWOA Member



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TREE IMPROVEMENT : Combining Genetics and Silviculture

In a tradition of searching out resource programs to enhance the benefits lowans receive from Iowa forests, DNR's Bureau of Forestry is pleased to include programs for "Tree Improvement."

The term Tree Improvement is generally defined as combining steps to genetically improve native tree species with steps to find innovative methods of regenerating entire forests of native trees. In other words, tree improvement applies known principles of plant breeding to develop trees that grow vigorously, then seeks methods to install that improved plant material back into our Iowa forests. Our bureau of forestry considers these principles of great importance and due to recent bureau reorganization, plans to accelerate and enhance tree improvement field work.

Tree Improvement works alongside nurseries and reforestation programs. For decades reforestation nurseries have produced quality seedlings in large quantities for reforestation within Iowa. These nursery efforts have been immensely successful, resulting in thousands of acres of new forests each year. Tree improvement seeks to enhance seed for reforestation programs and continually research new forest-regeneration products and processes.

An example may illustrate how a traditional tree improvement program works, and this particular example involves walnut. Black walnut is an obvious choice for genetic improvement. Walnut is valuable, and Iowa is famous for quality walnut. Walnut provides wildlife habitat and is ideal for certain riparian/stream buffer plantings designed to improve water quality. A tree improvement program could begin by finding the best (tallest, straightest, most vigorously growing) walnut remaining in Iowa's forests. This first step is known as selection, and several hundred selections within our native walnut population would be a good goal.

The second step is known as "progeny testing." In selecting walnut trees with superior appearance (called phenotype), it is assumed superior genetics (called genotype) caused that appearance. However, that is not always true and superior appearance could have been by chance. In progeny testing, seed is collected from selected trees, grown into trees in carefully controlled test plantations, and numerically evaluated. Progeny tests prove, or disprove the genetic worth of each selection. Those disproved are culled, those proved to be able to produce superior progeny are kept. It is not uncommon to cull 90% of selections based upon progeny testing and early (or precocious) growth of progeny is often an important factor to cull on.

This leads to the third (and most important) step which is development of seed orchards. Having identified genetically superior walnut trees through selection and progeny testing, these select trees are brought together in seed orchards where they may cross and produce a perpetual supply of seed for reforestation. Actually, culled progeny tests can be used as seed orchards, known as seedling orchards. Another method is via vegetative propagation of select trees which, for walnut, would be via grafting. Vegetative propagation reproduces the exact genetic package, and as apple and nut tree grafters know, grafted trees will produce seed quicker than seedling trees. Iowa's forestry bureau has been establishing seed orchards for over a decade, and this effort will now be accelerated under our newer, more concentrated tree improvement program.

Tree improvement also involves developing new methods of planting improved genetic plant materials back into Iowa forests.

The example with walnut will be continued to illustrate how that process may work. Foresters have already developed methods to establish walnut. Seedlings planted into open fields has been the most popular method and works very well. Direct seeding has gained popularity and in cases this is moving toward direct seeding of seeds proven to be viable by various tests or by being pre-germinated. Methods of protecting seed from predators are being developed too and include tree tubes and chemical spray treatments to discourage woodland critters while the seed germinates and establishes on the site. In certain cases, landowners have established plantations with vegetative propagation (grafted trees). The next big step in vegetative propagation is called "tissue culture," a process of inexpensively growing large quantities of trees from a few cells of the selected, genetically superior trees. Regarding new reforestation systems, many foresters and woodland owners are thinking of regeneration of improved trees within existing woodlands, for example within forest openings created by harvest. Historically tree planting has been in open fields. However most hardwood trees regenerate naturally. Efficient methods of planting or seeding into woodlands to supplement natural regeneration could become a more important forest management tool in the future.

A tree improvement program has other goals useful in overall care of Iowa's forest resources. Capturing and preserving the genetic diversity of our original native forests is one such overall goal. Identifying tree seeds adaptable to where they are planted is another overall goal. For example, if doing a restoration planting, the tree improvement program can point the tree planter to local parent trees producing seeds having the characteristics of Iowa's original forest. Another example involves the remnant native white pine forests in Iowa. Tree improvement is working to propagate and preserve those original genotypes so they will always be available for reforestation in our state.

The Bureau of Forestry is proud to have tree improvement on the list of forest resource management tools in Iowa and especially pleased to be able to say tree improvement efforts will be accelerated over the coming years. Plant genetics is an important industry in Iowa, and this effort with native forest genetics can add to our state's reputation in this biological field.

Forests are immensely important in Iowa. Forests can make excellent investments as many woodland owners already know. And forests are especially important to Iowa's economy. Forests contribute to jobs, recreation and a general improved quality of life. Upward trends in the importance of forests and sustainable forest management are predicted to continue. An effective tree improvement program will assist those upward trends.

John Walkowiak and Steve Pennington, Iowa DNR

John Walkowiak is Bureau Chief of Iowa's Bureau of Forestry, and Steve Pennington is a Forester III in charge of tree improvement and forest health.

Dates to Remember

August 7- 17 – Iowa State Fair

September 19 -- ISU/DNR Forestry Field Day at Walnut Ridge Tree Farm in Warren County

September 20 – IWOA Annual Meeting near Aquabi State Park in Warren County