KANSAS FORESTRY ASSOCIATION

Kansans for healthy woodlands

www.KSForestryAssociation.org

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2018 American Tree Farm System National Leadership Conference

The focus for this year's Leadership Conference was growth, strength, and increased impact of the American Tree Farm System. Many sessions highlighted various opportunities and ideas for additional growth and change to achieve sustainable private woodlands for the future.

The emphasis for western states was on wildfires, and a need to focus on restoring forest health in critical watersheds. Dr. Tom Swetman gave a detailed presentation regarding interpretation of tree rings, and understanding the relationship between humans and fire in the last two centuries. The presentation highlighted the intersection of ecological disturbances with the need for active stewardship of forests.

In another general session, ATFS leaders provided a panel discussion with foresters and partners applying new approaches and techniques modified from past successful interactions with landowners to increase involvement in forest stewardship.

There were several concurrent, smaller sessions dealing with the many barriers of engaging more landowners. It was interesting that many states have difficulties similar to those we face in Kansas.

An important session discussed the future demand for white oak, and the new white oak initiative for oak regeneration through partnerships, research, advocacy, and communication to engage more landowners. One session focused on a more modern approach to reach targeted landowners. Alabama and WoodsCamp partnered to reach out and engage landowners through Facebook with help from the American Forest Foundation. Another session suggested several ways to get our message out about our love of forests by choosing to engage landowners on many levels, to provide knowledge of tree cycles in a forested area, and to encourage the use of wood as a vital resource along with steel and concrete.

Our perception of Tree Farming in New Mexico is really more about mixed conifers growing in very little soil at the higher elevations. We had an opportunity to view an area near Albuquerque from an Aerial Tram at Sandia Peak.

- Carolyn Turney,
KS Tree Farm Committee Chair

Upcoming Events

- *December - May* – Order spring conservation seedlings online at kansasforests.org or call 888.740.8733
- *March 14, 1pm-3pm* – Tree Planting Workshop – McPherson Co. Extension Office – For more info or to RSVP email: tregehr@ksu.edu
- *March 29, 8am-12pm* – Biochar Workshop – Lawrence, KS – For more info, contact Heather Nobert 402.782.1453 or hnobert@unl.edu

Introducing New KFA Membership Levels

The KFA is dedicated to sustaining the health of Kansas woodlands, and is working towards increasing membership and funding sources. While we have begun a quarterly newsletter, and help to carry out successful field days, we need your help to continue publishing the newsletter, begin an active peer-to-peer networking program through methods such as informal get-togethers, and continue to support a part-time director.

To help us achieve our mission, we have developed a system of membership levels, allowing members to join at elevated levels, and receive small tokens of appreciation.

$20	***Standard Membership***
$21-$99	***Cottonwood* - name/business name in newsletter, KFA logo pen and pin**
$100-$499	***Pecan* - Cottonwood level, plus tote bag**
$500-$999	***Oak* - Pecan level, plus Kansas Forest Service tree bundle coupon**
$1000+	***Walnut* - Oak level, plus Lifetime Membership**

Be on the lookout for your membership renewal letter in the mail! Your support is key to continuing and expanding on the work we have been doing. We hope you will consider renewing at one of the new levels, and thank you in advance for your support! Your contribution is greatly appreciated, and will be used to continue increasing educational opportunities.
** Don't forget, the KFA is a 501(c)3 non-profit organization, making your donations tax deductible!

Using the "Hack and Squirt" Method

As with most things in life, one size or style rarely fits all. The Hack and Squirt (H&S) method is no different. I've been using this method for four years to control certain species that have a maximum breast height diameter of 12". Smaller diameter trees are targeted with H&S because large diameter trees typically require more hacks and have thicker bark, making this method less effective. H&S is recommended after heavy sap flow, and before dormancy, in June through mid-October. Traditionally, chainsaw timber stand improvement is completed during the dormant season so that warm temperatures, crawling insects, stinging nettles, snakes, or other pesky plants and animals are not an issue. The timing and working conditions at which H&S is completed can be a downfall to many.

Tools for H&S include a short, ridged machete or small axe, herbicide in a squirt bottle, safety glasses, and work gloves. I use a 1-gallon mix of herbicide: 25% Garlon 3, 3% Arsenal, 72% water, and 2 ounces of blue dye. This mix works extremely well on elm, hackberry, basswood, ash, black locust, honey locust, ironwood, silver maple, black walnut, oak, dogwood, and river bank grape. Always follow pesticide labels for conditions, and intended species to control. If terrain is steep, H&S is more efficient than carrying a chainsaw for girdling trees. Depending on tree density, it is probable to treat up to 10-plus acres per day, per person.

Steps to achieve a successful kill:

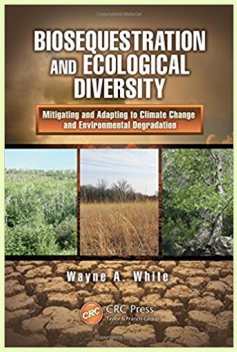
1) Strike the machete downward against the tree creating a cup, making sure the cut is through the cambium layer.
2) Leave the machete in the tree, and rotate your wrist away from the tree opening up the cup.
3) One squirt of herbicide in the tree is needed - if herbicide runs outside the cup, and down the side of the tree, too much herbicide is being applied.
4) For every inch of diameter, one hack should be made at the same height around the tree. Again, read the herbicide label, as less hacks may be needed depending on the type of herbicide being used.
5) The cups help hold the herbicide and allow it to be absorbed into the tree.
    - If multiple stems are present, treat all stems with the same technique
    - The machete is also handy to knock down spider webs, and to cut brush and vines away

- Luke Terry, Custom Forestry Applications LLC
KFA Board Member

Cups made from properly hacking a small diameter tree. Look closely for the blue indicator dye.

Several trees 10 days post-treatment. The active growing season moves the herbicide quickly, and signs such as leaf wilt can be present in a couple days.

Reflections after five years: *Biosequestration and Ecological Diversity: Mitigating and Adapting to Climate Change and Environmental Degradation*



A central argument made in this book is that a transformation from fossil fuel based energy systems in industrial societies, to systems based on solar, wind, hydro, biomass, and other low/no carbon energy sources will be inadequate to maintain habitability over significant portions of our planet. Even a very rapid energy system change, while necessary and important, cannot replace the essential carbon released from soils and biomass by human activity over the last 8,000 years or so. The growth of agriculture in the form of both crop and animal production has been, and remains, the primary cause of deforestation, degradation of grassland, destruction of marshes and wetlands, and the nearly universal degradation of cropland soil through erosion, depletion of soil organic carbon, and pollution with chemical pesticides and fertilizers. We humans have been systematically transferring carbon from the lithosphere, soil and biomass to the atmosphere. This transfer has severely diminished our planet's capacity for sustaining us, and the ecological systems upon which we and all other species depend.

The United Nations Food and Agriculture Organization has been warning for several years that we are moving from local and regional food shortages caused primarily by distributive inequities and poverty, toward global food shortages caused by soil loss/ degradation, water shortages, and overpopulation. Water shortages caused by depleted aquifers, disappearing glaciers, less snow pack in several key mountain ranges, and changing rainfall patterns due to climate change, now directly affect over one third of the global population. Much of the increased food production achieved in recent decades was made possible by irrigation. Irrigated acreage in the United States has peaked, and there are few remaining areas globally where irrigation can be expanded. Fresh water and fertile soil remain the central limiting factors for life on Earth.

Fortunately, there are proven land management practices that can re-carbonize our forests, grasslands and croplands and, at the same time, conserve and protect scarce water resources. We can move from an exploitative relationship with land to one that is restorative. Afforestation where appropriate, reforestation when possible, continuing to slow and eventually stopping tropical deforestation and careful forest management can re-carbonize our forests- the largest of our living carbon sinks. Protecting, expanding and restoring healthy, fully functioning forest ecosystems will have more impact on biological carbon storage than all other forms of ecological restoration. Reintroducing deep rooted native perennial grasses and protecting grasslands from overgrazing are proven ways of increasing carbon storage and permanence. Minimizing disturbance, planting cover crops, diverse crop rotations and reducing chemical contamination can increase soil organic carbon and productivity in crop lands. By working with nature to return carbon to plants and soils from our overloaded atmosphere we can address our climate imbalance and soil scarcity. High carbon soils absorb and retain scarce water resources.

There is no question that proven restorative forest, grassland and cropland management can increase carbon storage and soil fertility. The extent to which these practices are adopted globally is the key variable in determining if we continue to degrade our global ecosystems or begin to slow that degradation and begin to mitigate the ongoing decline in food security and ecological health. Unfortunately, we have seen in the past five years a continued emphasis, in nearly every nation, on unfettered economic growth. As long as economic growth remains a global priority and growth remains highly correlated with increased usage and degradation of scarce natural resources, including fresh water and fertile soil, it will be difficult if not impossible to make sufficient ecological progress to secure the habitability of our shrinking planet. We desperately need to develop strategies for development that do not involve increased throughput of natural resources. This, in combination with a rapid transformation of our energy systems and widespread adoption of proven restorative land management practices, will move us toward a healthy ecological future. There is no shortage of work to be done!

– Wayne A. White, PhD
KFA Board Member, landowner

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Special thanks to contributing authors:
Carolyn Turney, Luke Terry, and Wayne White

The KFA would love to hear from you!

What have you been doing with your land?

What would you like to see KFA doing for you?

Help KFA to save money and trees, go paperless!

If you would like to receive this newsletter electronically in the future, please contact Julie Sharp with your email address at: jsharp.kfa@gmail.com

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