

Meeting Notes

(Approved 18 March 2019, no changes)

Town of Greenville

Land Stewardship/AEA Committee

Monday, 18 February 2019 (5:00 pm)

Greenville Town Hall

Present: Present: Larry Bentle, Michael Brown, Sarah Grotjan, John Julius, Mia Ljung, Tim Menning, Steve Nagy, Pete Schroeder & Loren Steinacker.

Next Meeting: 18 March, Monday (5:00 pm at the Town Hall)

"To do," items are indicated in red."

1. Call to order. 5:03 pm.
2. Approval of 14 January 2019 meeting minutes. Draft minutes were approved as written (Motion by Pete, 2nd by Steve).

Old Business:

1. Committee account (Larry). Account balance is \$1068. **John will contact the Gun Club** to determine when we may erect a sign or two when the weather allows. They donated to our committee account.
2. Greenville Bike and Trail Committee (John).
 - a. Map. The proposed trail map has not been changed since our last meeting (see 14 Jan 2019 mtg notes). John is collecting resident comments on how best to construct surface road crossings or underpasses for the Town's trails. It was noted that for constructed underpasses they be made sufficient for animals to cross busy roads. John has Dane County's plan for trails and connections to other townships to use as a guide. A street and trail map of a Wisconsin Amish community was shown as an example of a means to promote area businesses (see [Attachment I](#)). Could this be applied to Greenville in a similar manner that incorporates future trails and streets (e.g. Ag Tourism)?
 - b. Trail type. The next Trail Committee mtg is on 20 March at 1:00 pm to discuss where in the Town to recommend a "side-of-the-road" path or an independent "off-the-road" path.
 - c. 2019 roadwork. **John will find out what type of trail/path** is planned for the 2019 road resurfacing on Julius Dr. between Spring and School road.

- d. Funding. Loren related that government funding for paths are likely be the first cut when road funds are short. For snow mobile trails the local club pays for the upkeep, etc. through membership dues and also arranges to cross private farmland. Clubs usually lease the right for a path through private farmland. Liability is generally covered in the lease. A number of their fields are crossed by snowmobile trails set up in this manner.
 - e. Private land trails. For the possibility of bike and walking trails that would cross private property (e.g. farmland), Loren suggested a “user fee” be used/collected, similar to a snowmobile club. It remains to be determined on how best to collect such a fee.
3. Town incorporation, (Michael). The Town Board and other project members are meeting right now to work on the Village Application to the state. We currently operate like a village with all the required services. Therefore, the process is rather easy in this respect and now just need to assemble the application and send it in.
 4. Comprehensive plan, (Michael). The next meeting is on 25 Feb at 4:30 pm to review the data from our last brainstorming meeting and condense it into a usable form.
 5. AEA expansion, landowner inquiries (Jeff). No report.
 6. Community Ag education -HASD.
 - a. Ag facility tours for HS students (Sarah). Sarah has talked with Amber L. (Hortonville HS) to request that some of the students that took part in two local business tours (see 14 Jan 2019 mtg notes) write up a tour report for our Newsletter and local newspapers. There were about 25 junior and senior students from Amber’s business class that took part in the tours.
 - b. School related activities (Sally). No new news as per email from Sally.

New Business:

1. Field of Dreams Project (Michael). Meeting this evening at 6:00 pm.
2. Land Trusts, recent inquiries (Mia).
 - a. Non-profit organizations or municipalities as per WI law can run Land Conservancies. Grants at the State level are available. **Mia said she would further pursue Northeast Land Trust** to see if it would be possible to tap into their organization to establish a farmland protection program for Greenville.
 - b. The Town of Dunn (adjacent to the city of Madison) has had a farmland protection program in place since 1997 that includes

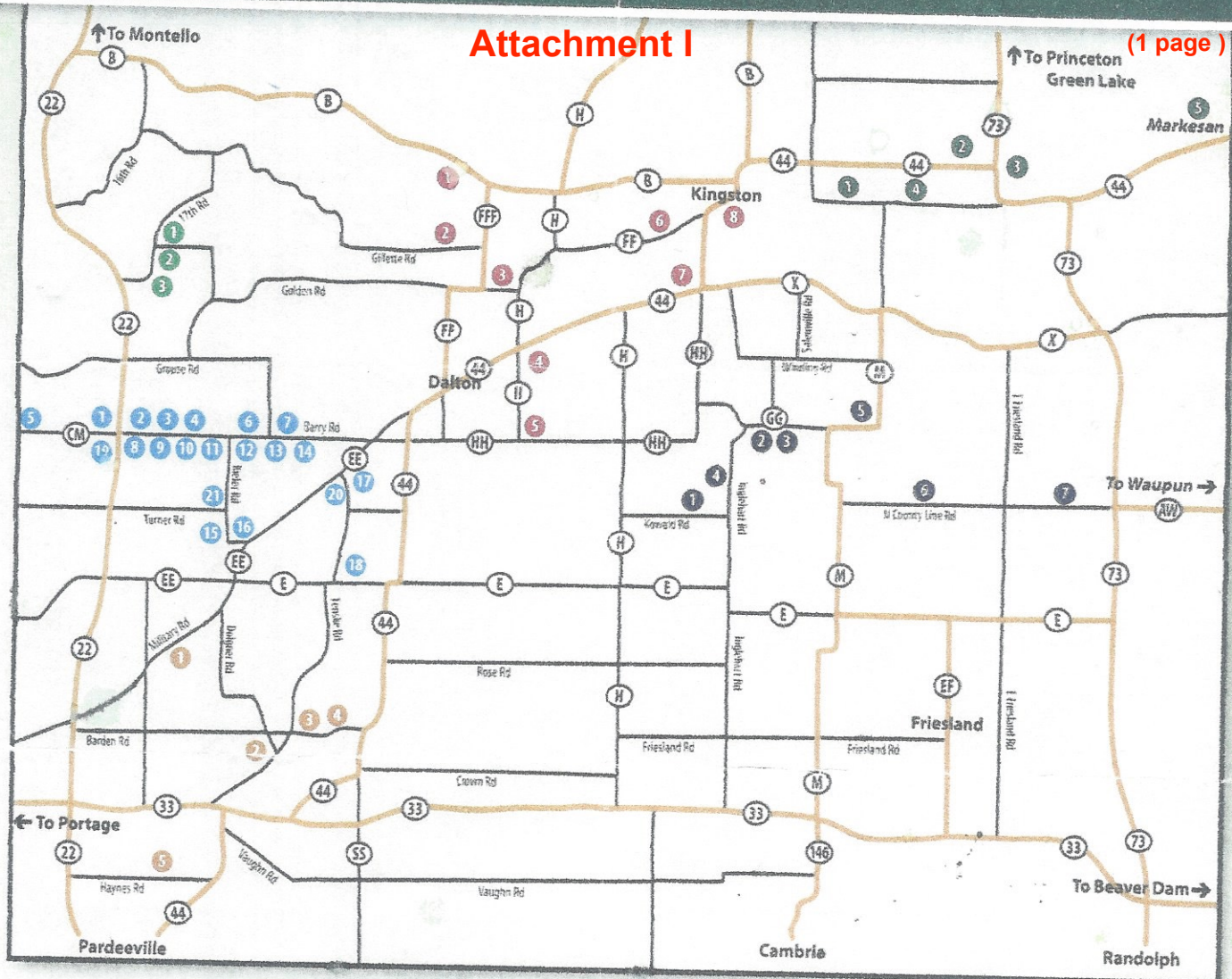
Purchase of Development Rights (PDR); see [Attachment II](#). About 40% of an administration person's time is used to apply for program grants and to oversee their Town's tax levy for the program.

3. What does Ag Enterprise Mean to Non-farmers & Small Struggling Farmers (Steve).
 - a. ***Our Greenbelt together with its Agricultural Enterprise Area are exceptional among other AEAs in Wisconsin*** due to its proximity to the Fox Cities. The real question is "what can we do with this asset that is so near to us and other similarly designated areas and AEAs do not have?" Steve presented a vision for Greenville's Greenbelt/AEA (see [Attachment III](#)) that outlines what we have and our truly unique opportunities.
 - b. [Attachment IV](#) entitled "Differentiated Ag-Related Ideas for Greenville's AEA" presents some reasoning and examples of what we as the Land Stewardship Committee can research and promote. Unique opportunities are available for us to discuss and explore.
 - c. Conservation Field Day sponsored by the Outagamie County Land Conservation Department was held on 18-20 September 2018 for the first time at Steve's Homestead Meadows Farm. For many years it was held at the Pat Koenke farm located just a mile or two away in our Greenville Township. See [Attachment V](#) that describes the event with a map (last page) of the 9 individual educational stations that the students could visit along a walking trail to learn about various aspects of agriculture and conserving what we have.
4. Related area news & topics (All). No additional news.
5. Next meeting. **Monday, 18 March 2019, 5:00 pm at the Town Hall.**
6. Adjournment. 6:37 pm.

Amish Communities

Attachment I

(1 page)



- 1 Pine Lumber
- 2 Bontrager Cabinets
- 3 Metal Buildings

- 1 CVS Windows
- 2 Fairview Doors, Shoes & Boots
- 3 Weaver Cabinets
- 4 Miller's GreenHaus
- 5 Miller Small Engine
- 6 Mast Bent & Dent
- 7 Lilac Wood Shop
- 8 Schmucker Canvas Shop
- 9 Katies Carpet Shop

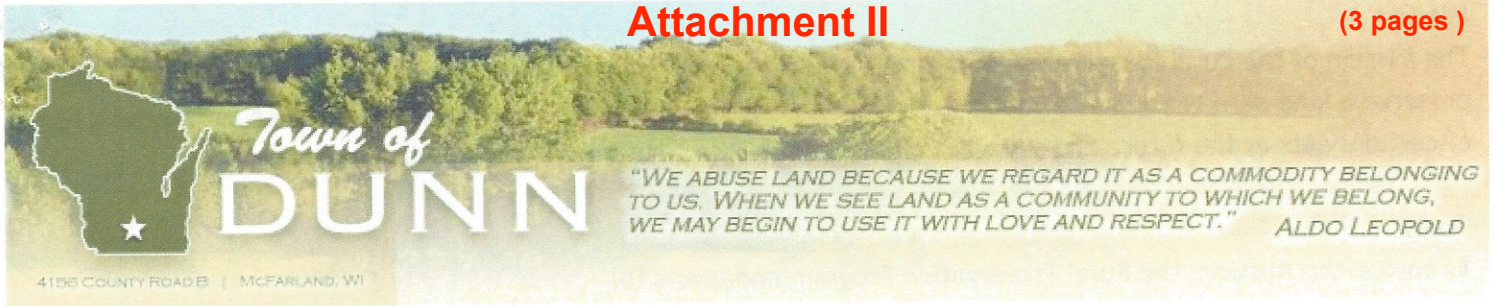
- 10 Schrock's Sawmill
- 11 Miller Cabinet
- 12 Mast Buggy Shop
- 13 Otto's Produce
- 14 Mishler's Country Store
- 15 Pleasant View Bakery
- 16 Jr. Miller Chair Shop
- 17 Maple Lane Furniture
- 18 Hershberger Sawmill
- 19 Ledlow's Kountry Korner
- 20 Countryside Welding & Repair
- 21 Hill Top Repair

- 1 Miller Harness Shop
- 2 Yoder Candy
- 3 Sunshine Jam Shop
- 4 Hillside Hardware
- 5 Townline Greenhouse

- 1 Weaver Harness Shop
- 2 Maple Grove Cabinets
- 3 Yoder Millwork
- 4 Whitetail Ridge Woodworking
- 5 D&L Metal Buildings
- 6 Oven Fresh Bakery
- 7 Miller Cabinet Shop
- 8 Funbaggs Bar & Grill

- 1 Grandview Greenhouse
- 2 Mullet Furniture Finishing
- 3 Wayside Repair
- 4 A&E Foods
- 5 All About Quilting

- 1 Sandhill Cabinets
- 2 Bentwood Rockers
- 3 Salemville Cheese Factory
- 4 Salemville Green House
- 5 Candy Shop
- 6 Chair Shop
- 7 Furniture Shop



(/)

[Home \(/ \)](#) [Departments \(/departments/\)](#) [Land Use \(/land-use/\)](#) [Services \(/services/\)](#)

[Ordinances \(/ordinances/\)](#) [Permits & Forms \(/permits-forms/\)](#) [Elections \(/elections/\)](#)

[Contacts \(/contacts/\)](#) [More... \(/more/\)](#) [Site Search \(/site-search/\)](#)

[Land Use \(/land-use/\)](#)

[Comprehensive Plan \(/land-use/comprehensive-plan/\)](#)

[Comp Plan Development Process \(/land-use/comp-plan-development-process/\)](#)

[Rezone, CUP, Land Division Info \(/land-use/rezone-cup-land-division-info/\)](#)

[Purchase of Development Rights \(PDR\) \(/land-use/purchase-of-development-rights-pdr/\)](#)

[Property Assessment and Taxes \(/land-use/property-assessment-and-taxes/\)](#)

[Storm Water \(/land-use/storm-water/\)](#)

[Historic Documents \(/land-use/historic-documents/\)](#)

[Awards \(/land-use/awards/\)](#)

[2019 Comprehensive Plan Update \(/land-use/2019-comprehensive-plan-update/\)](#)

Purchase of Development Rights (PDR) Program



The Town of Dunn's PDR program is a voluntary farmland protection method that compensates landowners for inhibiting future development on their land. Through this program, the Town purchased the development rights to its first piece of property in April 1997 and continues to use this tool today in order to fulfill the mission, goals, and strategies of the program:

Conservation Organization

Number of Acres

Town of Dunn

3,396.40

Wisconsin DNR

1747.2

Dane County

622.72

The Nature Conservancy

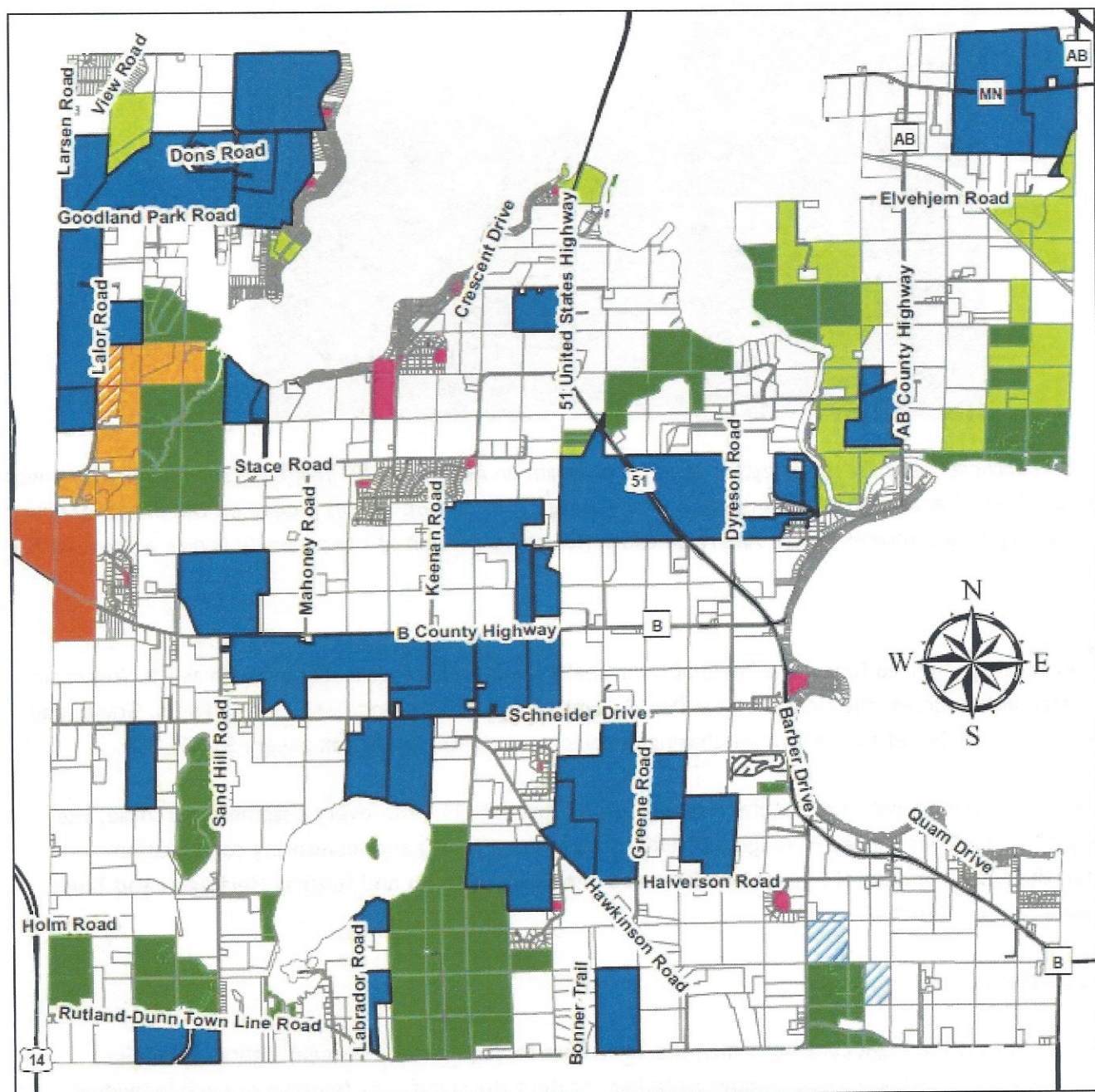
221.7

U.S. Fish and Wildlife Org.

70.79

Map of Protected Land

(Note: Easements are Private Property - No Public Access is Granted)



See an enlarged map and a legend (</media/1397/protected-lands-april-2017.pdf>).

- **Guide to Conservation Easements: A Summary of the Legal Document** (/bmos-resources/guidetoconservationeasements1.pdf)
- **Sample Conservation Easement** (/bmos-resources/pdrsampieeasement1.pdf)

Cost of Community Services Studies

Many studies show that agricultural and open space uses greatly reduce the tax burden on residents as compared to residential uses. The following studies enumerate the relationship between revenues generated by various land uses and compares the tax burden that servicing each use places on the tax payers of a community.

- **Cost of Community Services Study, 1977** (/bmos-resources/costsdevelopmentdunnfitchburg.pdf)
- **Cost of Community Services Study, 1994** (/bmos-resources/costofcommunityservicesstudy1994.pdf)

Cost of Community Services Study for Three Dane Towns: Dunn, Perry, and Westport 1999

- **Cover - Page 24** (/bmos-resources/communitycostcover.pdf)
- **Page 25 - Page 31** (/bmos-resources/communitycost25.pdf)

Tax Information

Listed below is tax information for conservation easements. These materials are for informational purposes only and should not be construed as legal advice.

- **Tax Consequences of Transferring Development Rights** (/bmos-resources/taxconsequencesoftransferringdevelopmentrights.pdf)
- **Tax Incentives: Guide to the Federal Conservation Tax** (/bmos-resources/taxbrochure.pdf)

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A Vision for Greenville's Greenbelt/AEA

FACTS

Present State of Farming in Wisconsin

- Farm failures and bankruptcies are rampant
- Average age of farmers is in the retirement range
- Trend toward corporate mega farms and diminishing old-fashioned family farms; Most young farm family members are leaving the farm

Present State in Greenville's Greenbelt/AEA

- Several rental farms
- One mega-operator
- Several residential development initiatives
- One long-term, successful agri-tourism enterprise

Unique Features of Our Greenbelt

- Greenbelt designation
- Beautiful farm vistas
- Historic Yellowstone Trail designation
- Yellowstone Trail monuments and landscaping
- Agricultural Enterprise Area designation
- Beautiful AEA signage
- Several Century Farms
- Three windmills
- Wisconsin's first Agricultural Event Venue – with 6,300+ groups served since 1981

OPPORTUNITY

There is an unmatched opportunity to create a one-of-a-kind AEA, our own unique ***Agricultural and Ecological Education Region*** that includes:

- A variety of ***agri-tourism, agri-education*** and ***agri-entertainment*** enterprises
- Special ornamental road signs
- Enhanced landscaping with native flowers and grasses along roadways and corners
- Opportunities for local clubs and organizations to participate as well as raise funds to support their missions.
- A PDR program that rewards farm owners for helping to create resources that benefit the larger community

Differentiated Agriculture-related Ideas for Greenville's AEA

by Steve Nagy

Developed and Submitted on 03/20/2016

Some minor modifications were made to this document prior to its reintroduction on 02/18/2019.

Eric Fowle stated at the last meeting something that stuck with me. He said (paraphrased):
'We should strive to be different than the other, typical, larger AEAs around the State.'

Here are some further thoughts on that idea.

What Does the AEA Mean to Most Greenville Residents?

It means pretty much nothing. To say, as we do, that we are preserving farmland for future generations or for residents of Greenville to enjoy means little. People in Greenville's subdivisions don't take a ride to our Greenbelt to see farmland. They see it everywhere, and mostly think nothing of it.

If we *actually* want Greenville landowners to take note of and appreciate the farm assets of our AEA, we need to create opportunities for them to **PARTICIPATE**.

What Can Our Committee Do?

We can encourage the creation of ag-related land uses that are different than what people see driving around, uses that invite them in. Invariably this means one of two things:

1. Direct farm-to-home food opportunities
2. Agri-tourism, agri-education and agri-entertainment opportunities

I have compiled a starting list of these kinds of enterprises. There are many more we can identify. Nothing here is unique. There has been an explosion of these types of farm enterprises in the last twenty years, as small farmers have struggled to survive. These enterprises have two things in common:

1. They are different from the typical large-scale agriculture mostly seen around the state—corn, soybeans, wheat and dairy.
2. They have the potential to *draw* people in, to *take notice*, to *participate*, and to *appreciate* their proximity to agriculture.

What Can the Town Do?

Our landowners have to be willing to invest in developing alternative ag enterprises or allow others—tenant farmers or small-scale purchasers--to do so.

Through this approach, we have the potential to differentiate our AEA.

Agri-tourism, Agri-education and Agri-entertainment Ideas

1. Pick-your-own fruits and berries
2. Farm-scale vegetable gardens and sales stands
3. CSA—Community Supported Agriculture
4. Educational petting Farm
5. Hayrides and sleigh rides
6. Pumpkin patch
7. Corn maze
8. Bed & Breakfast accommodations
9. Farming school
10. Vineyards and Wineries
11. Craft Brewery
12. Craft cheese maker
13. Craft sausage maker
14. Organic meat farmer
15. Farm-to-table restaurant
16. Pizza barn with wood-fired clay-ovens
17. Farm-based wedding and special event venue
18. Herb gardens and gift shop
19. Antiques barn
20. Demonstration gardens
21. Horse stables and riding trails
22. Demonstration net-zero energy buildings
23. Demonstration Agri-hood
24. Demonstration 'tiny house' living
25. Summer Family Farm Adventurecamp program
26. Etc., etc., etc.

CONSERVATION Field Days

Our 54th Event Sponsored by:

The Outagamie County Land
Conservation Department



Thanks to the Nagys!

Steve Nagy, owner of Homestead Meadows, was born in Hungary, where he cultivated an early appreciation for nature and conservation. Steve was 12 when his family escaped communism during the 1956 Hungarian revolution against the Soviet Union. The Nagy family arrived as refugees in the United States in January, 1957.

After graduating from Stout State University in 1968, Steve and his wife Arlene and their baby moved to Appleton, where Steve began a career as a manufacturing technology educator at the newly formed Fox Valley Technical Institute.

Steve was searching for a farm to buy when he learned of an estate auction to be held just three days later on May 2, 1970. Hiking over the property the day before the auction, *"I found myself in paradise"*, Nagy reminisces. But Kelly Wickert of the auction firm Long, Wickert & Karol, had advised him that the buildings were probably not worth saving, and any buyer should consider having the Greenville Volunteer Fire Department clear the site.

With a heavy yet hopeful heart, Nagy weighed his options. Growing up in one of the biggest cities in Europe, Steve had never before attended a farm auction. A recent college graduate, in a new job, in a new city, with a baby, a pregnant wife, a car that barely ran, \$7,000 in student loans (big, 1970s dollars) and only \$600 in the bank, Nagy was by any standard 'over his head' at the prospect of buying a run-down farm.

At the end of a long and stressful auction day—for their \$500 nonrefundable earnest money—the Nagys began the long quest to transform the buildings and 55 acres of rolling farmland, woods, and wetlands into the showplace that it is today. The project continues and is *"sure to outlive me"*, quips Nagy, as he reflects on other farm properties he has purchased and restored since then. Steve deflects the often heard compliments by saying, *"It was just a little tinkering...every day...for about 48 years"*.



The two main buildings on what was to become Homestead Meadows Farm, photographed on May 3, 1970. Below, at a recent one of the 6,000 special events hosted at the Farm since 1982.



Back to the Summer of 1970. Steve camped out all summer while his wife, Arlene and baby Steve moved back with her parents, and did nearly all the work himself. The day before Thanksgiving was a 'moment of truth.' Nagy flipped the switch that would fire up the free oil furnace obtained through the Bargain Bulletin. The 'sweet' purring of the burner signaled the start of making the house a home.

In 2004, the Nagy family received a Historic Preservation Award from the Wisconsin Trust for Historic Preservation. It recognizes "exceptional efforts on behalf of historic preservation in Wisconsin." Since opening as an event venue in 1983, Homestead Meadows Farm has hosted over 6,000 groups for youth educational camps, special events including church outings, company picnics, weddings, class and family reunions, hay and sleigh rides, campfire socials, fund-raisers, and now... **Conservation Field Days**. The Nagys are honored to offer their farm to the countless young people who will benefit from experiences focused on developing a connection with nature. We thank the Nagys for their contribution to this important annual program—ongoing now for 54 years—under the leadership of the Outagamie County Land Conservation Department.

Cooperating Agencies and Teaching Staff:

Outagamie County Land Conservation Dept., Outagamie County Land Conservation Committee, Outagamie County Recycling & Solid Waste, Outagamie County Parks Dept., UW Cooperative Extension Service, WI Department of Natural Resources, USDA—Natural Resource Conservation Service, Department of Agriculture, Trade and Consumer Protection, Knutzen Crop Consulting, Tilth Agronomy Group, USDA-Wildlife Services, Fox-Wolf Watershed Alliance, NEW Water, Outagamie County Master Gardeners, Cindy Chitwood and Honey Bee Ware...and the many retired conservation professionals and citizen volunteers.

Thank you Outagamie County Dairy Promotion Committee for providing the lunch beverages, Riesterer & Schnell, Inc. for the use of the John Deere Gators, and to the Outagamie Area Pheasants Forever Chapter 792 for the donation of Jeopardy prizes.



WATER

Water is everywhere! Catching trout in crisp clear streams, shooting the rapids in a canoe, lazing around the lake in an inner tube, quenching your thirst on a hot summer day—none of these activities would be possible without fresh water resources. We live in a state with many rivers, lakes, and streams. Our state even borders two of the largest lakes in the world! With this great amount of water comes a great amount of responsibility. Our local waterways are vulnerable to pollutants running off the landscape in our cities and countryside. Fresh water is vital to maintain healthy economies, people, and ecosystems. Remember, we *all* have a stake in protecting the quality of our water.

1. Where does stormwater go after it enters the drains on our streets?
a. wastewater treatment plant b. lakes and rivers c. swimming pools d. wells
2. What's another word for watershed?
a. inlet b. estuary c. tributary d. basin
3. What is the word used to describe the gradual wearing away of land surface materials, especially rocks, sediments, and soils?
a. erosion b. contamination c. flooding d. evaporation
4. Where is water treated to make it safe to drink?
a. water treatment center b. wastewater treatment plant c. water tower
5. (T or F) Contaminated stormwater and run-off from agriculture, development, and other sources remain the most serious threats to Wisconsin's lakes, rivers, and streams.
6. Which two Great Lakes border Wisconsin?
a. Superior and Huron b. Superior and Michigan c. Michigan and Huron
7. Into what body of water does the Fox-Wolf Watershed drain?
a. Black Otter Lake b. Bay of Green Bay c. The Wolf River
8. Which is a pollutant carried to our waterways by stormwater runoff?
a. grass clippings b. oil c. dirt d. a, b & c

Please see backside of manual for answers.



CONSERVATION TECHNOLOGY

Technological innovations in conservation have changed drastically over the last several decades. Technology has become a common and indispensable part of conservation work today, allowing for the collection of more and better data to help guide management decisions. Whether it's GIS phone apps used in the field to map points, or drones flown over the landscape to gather information on terrain, conservation technology has become a valuable tool used to aid conservation fieldworkers in their efforts.

1. How many miles above Earth do GPS satellites orbit? a. 100 b. 1,200 c. 12,600 d. 121,000
2. Why was GPS invented?
a. to track wildlife b. to assist the U.S. military c. to help locate earthquakes
3. What is the more accurate term for drones?
a. helicopter b. quad-copter c. small unmanned aerial system
4. (T or F) GIS data can represent almost anything as long as it has a geographic component.
5. Why do people use drones?
a. for fun b. to take pictures c. for emergency response d. a, b & c
6. (T or F) Surveying is the technique and science of accurately finding out the position of points and distances and angles between them.
7. Which of the following is not something that could cause a drone crash?
a. interference with satellite signals b. a bird attack c. severe weather d. power lines
8. Which of the following projects have used surveying:
a. construction of the Egyptian Pyramids b. creation of property boundaries in Outagamie County
c. construction of the Empire State Building d. a, b & c

Please see backside of manual for answers.

CONSERVATION JEOPARDY



A quiz game featuring trivia about conservation and the environment!

(Your instructors will give you some of the answers at the stations...so pay attention!)

Pick a category and let the game begin! See if your team can earn a dollar value which is paid out to the winning team in the form of a prize.



GARDENS & POLLINATORS

Without the actions of pollinators, agricultural economies, our food supply, and surrounding landscapes would collapse. Bees, birds, butterflies, insects, beetles, and other small mammals are responsible for bringing us one out of every three bites of food. They sustain our ecosystems and produce our natural resources by helping plants reproduce. Pollinating insects and animals travel from plant to plant carrying pollen on their bodies which is vital to the reproductive systems of most flowering plants that provide fruits, veggies and nuts; medicines; oils, fibers and raw materials; and prevent soil erosion.

Many pollinator populations are on the decline due to habitat loss, disease, climate change, and misuse of chemicals. Make a positive impact at home by providing a variety of flowering plants, encourage native species, and use pesticides only when necessary.

We can change the future for pollinators!

1. Roughly _____ of global crop production relies on pollinators.
a. one-third b. half c. all
2. (T or F) Increasing pesticide use is a way you can help protect pollinators.
3. _____ of the world's 250,000+ flowering plants are estimated to rely on animal pollinators (which includes insects).
a. 20-40% b. 40-60% c. 60-80% d. 80-100%
4. Flowers in the colors blue, purple, violet, white, and yellow tend to attract _____ as pollinators.
a. hummingbirds b. bees c. moths d. bats
5. (T or F) You don't need a lot of space for a pollinator garden. Pots or buckets filled with a variety of flowering plants will do.
6. What are the two most common products produced by plants to attract pollinators?
a. pollen and nectar b. pollen and chlorophyll c. nectar and carbon dioxide
7. (T or F) Research suggests that native plants are four times more attractive to native bees than introduced plants.
8. Honey bees are social insects meaning that they:
a. live in colonies b. each member has a specific job c. they cannot survive on their own d. a, b & c

Please see backside of manual for answers.

RECYCLING & COMPOSTING

All around the country, landfills are becoming full, garbage incinerating is expensive, and other waste disposal options are becoming even harder to find. Reducing waste is the easiest way of taking action for the planet, and recycling comes in a close second. By recycling and reducing waste, we show that we care about conservation, and it sets a positive example. Recycling saves energy and water, lowers pollution and greenhouse gas emissions, improves air and water quality, preserves landfill space, and conserves natural resources. Composting provides a way to not only reduce the amount of waste needed to be disposed of but also to convert it into a product that is useful for gardening, landscaping, and growing house plants. With composting, we can do more than just send cans or newspapers off for recycling - we can see the entire cycle, from "icky" food scraps or other organic wastes, to something that is pleasant to handle and is good for the soil. Composting makes us aware of organic wastes as potential resources.



1. Which item is not accepted in our recycling program?
a. milk cartons b. plastic caps c. Styrofoam d. paper bags e. plastic water bottles
2. (T or F) Meats, dairy products, and pet waste are good items to compost.
3. How many times can an aluminum can or bottle be recycled?
a. forever b. once c. four times d. twenty times
4. Each year, Wisconsin households send _____ pounds of "food waste" and compostable material to our landfills.
a. 600 b. 6,000 c. 600,000 d. 600,000,000
5. On average, what percentage of waste is recycled in Wisconsin each year?
a. 33% b. 50% c. 66%
6. Compost usually takes _____ to make, although it can take longer than this, especially in cold weather.
a. 2 days b. 3-9 months c. 3 years d. 10 years
7. (T or F) Recycling is the law in Wisconsin.
8. (T or F) Outagamie County Recycling & Solid Waste operates a recycling facility that is capable of processing up to 100,000 tons of material every year.

Please see backside of manual for answers

FOREST MANAGEMENT



Many animals, such as birds, squirrels, raccoons, and a variety of insects, spend much of their lives in trees. These animals are born in trees, live in trees, raise their young in trees, and seldom come down to the ground. Trees provide them shelter from the weather and from enemies. Trees provide food in the form of fruits, nuts, leaves, bark, insects, and roots. Even dead trees provide shelter and food. Practically every part of a tree can be used to make some useful product for us, including thousands of products for our daily lives. We eat fruits and nuts from trees, use decorative woods for jewelry and art projects, and make practical items like books and fences from wood. Wood is used as a fuel for cooking and heating in stoves, fireplaces, and barbecue grills. Houses, paper, and boxes are made from trees, and the fibers and chemicals from wood are used to make products such as rayon fabric and rubber balls. Not to be forgotten are the jobs trees provide for people. Trees make our world a nicer place. If trees didn't breathe, neither could we. Roots help hold soil in place to prevent erosion which not only saves soil, but also helps keep our waterways clean. Imagine your neighborhood without trees. Parks and campgrounds would certainly not be the same without their presence.

1. (T or F) Insects and diseases are excellent hitchhikers in firewood. Firewood that looks clean may actually be hiding insects like emerald ash borer, gypsy moth, and tiny spores of a tree killing fungus such as oak wilt.
2. Young trees from a nursery that are 2-3 years old are called _____.
a. babies b. sprouts c. seedlings d. spuds
3. Ice cream, frosting, pancake syrup, and salad dressings use a part of the tree called _____ to make them thick, smooth and creamy.
a. chlorophyll b. cellulose c. sap d. bark
4. What can you count to tell the age of a tree? a. leaves b. roots c. annual rings d. branches
5. Arbor Day is celebrated in Wisconsin on the last Friday of: a. June b. April c. September
6. How much of Wisconsin is covered by forestland today? a. 22% b. 46% c. 93%
7. How many gallons of sap does it take to produce one gallon of maple syrup?
a. 5 gallons b. 10 gallons c. 20 gallons d. 40 gallons
8. (T or F) The Emerald Ash Borer (an invasive wood boring beetle) has been confirmed in Outagamie and surrounding counties.

Please see backside of manual for answers.

POND & WILDLIFE

Variety makes life interesting, and it makes wildlife habitat interesting. The more kinds of habitat you have, the more kinds of wildlife you can attract. The wildlife management term that best describes this type of place is *edge*. The *edge* is the place where two different habitats meet—such as woodland and a wetland, or a farm field and a woodlot. *Edge* is important because it contains plants from both habitats and therefore provides much of the food, cover, and water needs of wildlife found in either of the habitats. Animals look for these needs when searching for a home in a particular area before they move into the neighborhood. What's the habitat like? How much food is available? Where's the nearest watering hole? Is there enough shelter to raise young? What's the climate like? How close are people to their home territory? Humans move organisms around all the time. Sometimes when we bring a non-native species into a new area the species will take over and spread rapidly and widely throughout the area destroying *edge*. When this happens, the spread can cause major harm to the native ecosystem or humans. When non-native plants, animals, or pathogens rapidly take over a new location and alter the ecosystem, we consider them invasive species. *POOR HABITAT MEANS LESS WILDLIFE!*



1. What is a water saturated land where aquatic plants and animals live?
a. aqueduct b. river c. wetland
2. Purple loosestrife, zebra mussel, sea lamprey, spotted knapweed, and round goby are all considered _____?
a. weeds b. native species c. non-native invasive/exotic species
3. What does habitat fragmentation do to a landscape?
a. creates more space b. causes population level changes to native plants & animals c. stops invasive species
4. Which is not a component of wildlife habitat:
a. water b. food c. sunlight d. cover
5. Why are so many wetland soils protected by law?
a. They are beautiful. b. They release methane. c. They support cows. d. They clean water.
6. (T or F) Foreign shipping is one route invasive species arrive in the U.S. Corrupt shipping practices can bring in invasive species within pallets, crates and even within the cargo ship ballast water.
7. (T or F) To slow the spread of invasive species, it is helpful to clean off shoes, tires, clothes, pets, and gear after recreation.
8. Exotic or invasive species lead to the following problems except:
a. increased biodiversity b. disease c. loss of native species

Please see backside of manual for answers.



FOOD PRODUCTION

Dairy products may be Wisconsin's claim to fame, but the state produces many unique specialty crops as well. Wisconsin's balanced climate is ideal for growing a variety of crops. The cooler temperatures of the fall and winter give the state's soil the opportunity to revitalize itself, while the summer's warm temperatures are great for growing crops. Here in America's Dairyland, we don't just enjoy our milk and cheese, we thrive on it! The dairy industry accounts for nearly 40 percent of all Wisconsin agriculture jobs. Cheese makers in Wisconsin produce more than 600 varieties including Italian, Mozzarella, and other specialty cheeses. Wisconsin also leads the nation in production of snap beans for processing, cranberries, ginseng, milk goats, and corn for silage; and some lesser known products like mink and horseradish. Agriculture works hard for Outagamie County every day. Family-owned farms, food processors, and agriculture related businesses generate thousands of jobs and millions of dollars of economic activity while contributing to local income and tax revenues. Outagamie County is among the top 10 dairy producing counties in the state and among the top 50 in the country.

1. It takes 10 pounds of milk to produce _____ of cheese.
a. one slice b. one pound c. one wheel
2. This breed of cow is the most popular breed of dairy cattle in Wisconsin, accounting for more than 90% of the dairy cattle population?
a. Brown Swiss b. Holstein c. Guernsey
3. Farmers receive _____ of each retail dollar spent on food that is eaten at home and away from home.
a. 3 cents b. 16 cents c. 40 cents
4. (T or F) A dairy cow producing 100 pounds of milk each day slurps 45 gallons of water (bathtub full) to wet her whistle.
5. There are _____ farms in Wisconsin.
a. 540 b. 10,430 c. 68,900 d. 184,300
6. _____ was designated the official state beverage of Wisconsin in 1987.
a. root beer b. cranberry iced tea c. milk
7. Wisconsin leads the nation in the production of cranberries, mink pelts, milk goats, corn for silage, snap beans and _____ production.
a. cheese b. lettuce c. peanuts
8. (T or F) China buys more U.S. soybeans than any other country, paying over \$7.2 billion. Mexico is second, paying \$1.7 billion.

Please see backside of manual for answers.

SOILS



SOS - Save Our Soils! Why? Most of our food comes directly or indirectly from plants anchored in and nourished by soil. Part of the oxygen we breathe is produced by plants living in soil. Much of the water we drink and use every day soaked into, and was filtered by soil. And, nearly everything we build is built on soil, and often with it. Although soil is a renewable natural resource, it is only renewable over long periods of time, measured not in days or years, but in decades and even centuries. Soils differ because each originated from different parent materials, are located in different climates, and have been developing for different lengths of time. Everything we come into contact with on a daily basis can be traced back to soil, yet we often think of soil as dirt, something that is inconvenient, needs to be swept up, dusted, and washed out of our lives. No matter how hard we try, we cannot separate ourselves from soil and the role it plays for all of us. Regardless of where you are, there is soil under your feet. It is a resource we need to protect.

1. What is *not* a benefit of cover cropping?
 - a. increases amount of water that drains off fields
 - b. provides nutrients to soil
 - c. helps control pests and diseases
2. Soil scientists estimate that it takes nature _____ to make just one inch of topsoil.
 - a. 10 years
 - b. 50 years
 - c. 500 years
3. Soils feed all the world's population. What threatens the fertility of the world's soils?
 - a. poor farming practices
 - b. climate change
 - c. erosion
 - d. urbanization
 - e. a, b, c & d
4. Soil consists of four items: minerals 45%, water 25%, air 25%, and _____ 5%.
 - a. carbon monoxide
 - b. organic matter
 - c. salt water
5. Wisconsin's official state flag was adopted in 1913. A sailor with rope and a miner with an axe surround a yellow shield in the center. The shield depicts an arm and hammer, a plow, a pick and shovel, and an anchor. What does the plow symbolize? _____
6. (T or F) Almost all of the antibiotics we take to help us fight infections were obtained from soil microorganisms.
7. (T or F) Soil has six layers called horizons O, A, E, B, C and R. Horizon O is the topsoil and E is bedrock.
8. Which layer of the soil is the most productive? _____
 - a. bedrock
 - b. humus
 - c. topsoil

Please see backside of manual for answers.

WATER

- | | | | |
|------------------------|-----------------------------|------------------------|------------------------------|
| 1. b. lakes and rivers | 2. d. basin | 3. a. erosion | 4. a. water treatment center |
| 5. True | 6. b. Superior and Michigan | 7. b. Bay of Green Bay | 8. d. a, b & c |

CONSERVATION TECHNOLOGY

- | | | | |
|----------------|-----------------------------------|---|----------------|
| 1. c. 12,600 | 2. b. to assist the U.S. military | 3. c. small unmanned aerial system | 4. True |
| 5. d. a, b & c | 6. True | 7. a. interference with satellite signals | 8. d. a, b & c |

GARDENS & POLLINATORS

- | | | | |
|-----------------|-------------------------|--------------|----------------|
| 1. a. one-third | 2. False | 3. c. 60-80% | 4. b. bees |
| 5. True | 6. a. pollen and nectar | 7. True | 8. d. a, b & c |

RECYCLING & COMPOSTING

- | | | | |
|-----------------|------------------|---------------|-------------------|
| 1. b. Styrofoam | 2. False | 3. a. forever | 4. d. 600,000,000 |
| 5. a. 33% | 6. b. 3-9 months | 7. True | 8. True |

FORST MANAGEMENT

- | | | | |
|-------------|-------------------------|------------------|--------------------|
| 1. True | 2. c. seedlings | 3. b. cellulose | 4. c. annual rings |
| 5. b. April | 6. b. nearly half (46%) | 7. d. 40 gallons | 8. True |

POND & WILDLIFE

- | | | | |
|-------------------------|--|--|------------------------------|
| 1. c. wetland | 2. c. non-native invasive/exotic species | 3. b. causes population level changes to native plants & animals | 4. c. sunlight |
| 5. d. They clean water. | 6. True | 7. True | 8. a. increased biodiversity |

FOOD PRODUCTION

- | | | | |
|-----------------|----------------|----------------|---------|
| 1. b. one pound | 2. b. Holstein | 3. b. 16 cents | 4. True |
| 5. c. 68,900 | 6. c. milk | 7. a. cheese | 8. True |

SOILS

- | | | | |
|--|-----------------|--------------------------|----------------------|
| 1. a. increases amount of water that drains off fields | 2. c. 500 years | 3. e. a, b, c & d | 4. b. organic matter |
| 5. agriculture | 6. True | 7. False, "R" is bedrock | 8. c. topsoil |

Conservation Field Days Homestead Meadows September 18-20, 2018

