



THE NEWSLETTER

Dubuque County Conservation Society

“Organized in 1933 for Protection of Soil, Forests, Waters and Wildlife”

P.O. Box 645

Dubuque, IA 52004-0645

DUBUQUE COUNTY CONSERVATION SOCIETY

Unaudited minutes—January 12, 2021

Present: Punkie Birkel, Pat Hayes, Paul Kaufman, Mark Kaufman, Connie Kintzle, Tom Klinge, Bev Rettenmeier, Bob Walton, Tim Fiedler, Matt McQuillan

Call to Order: Pat Hayes (via ZOOM) at 6:08 pm.

Approval of minutes: Minutes were presented by Secretary, Bob Walton. Minutes approved as presented on a motion by Birkel, second by Paul Kaufman.

Treasurer’s report: Presented by Treasurer, Connie Kintzle. Approved on a motion by Rettenmeier, 2nd by Klinge.

New Business:

--Election of officers: Pat Hayes presented the following slate of officers for 2021 for approval--President-Mark Kaufman, Vice-president-Paul Kaufman, Treasurer-Connie Kintzle, Secretary-Bob Walton. Hayes asked if there were any additional nominations. There were none. Rettenmeier moved and Fiedler seconded the motion that nominations cease. Motion carried. Rettenmeier moved and Fiedler seconded that the slate be approved unanimously. Motion carried.

--Discussion of DCCS name change: After discussion, Hayes moved, with a 2nd by Kintzle, that members think about possible name changes and present them at the next meeting. Motion carried unanimously.

--Workdays: Fiedler stated that workdays to cut and spray invasive trees will be held on January 18, 2021 at the Oxford Junction Wildlife Area and on January 28, 2021, at Whitewater Canyon. Those interested in helping should call him at 563-381-9031.

--Discussion ensued about two letters received from individuals that are dropping their DCCS membership because of articles in the newsletter. It was the consensus of the board to take no action on the matter.

The next meeting will be at 6:00 pm on Tuesday, February 8, 2021, via ZOOM.

Adjournment: Meeting adjourned at 6:35 pm on a motion by Kintzle, and a 2nd by Hayes.

Respectively submitted,
Bob Walton, Secretary

DUBUQUE COUNTY CONSERVATION SOCIETY

Unaudited minutes—December 8, 2020

Present: Punkie Birkel, Pat Hayes, Paul Kaufman, Connie Kintzle, Tom Klinge, Bev Rettenmeier, Bob Walton, Tim Fiedler, Matt McQuillan, Brad Morman

Call to Order: Pat Hayes (via ZOOM) at 6 pm.

Approval of minutes: Minutes were presented by secretary, Bob Walton. Minutes approved as presented on a motion by Birkel, second by Paul Kaufman.

Treasurer’s report: Presented by treasurer, Connie Kintzle. Approved on a motion by Klinge, 2nd by Paul Kaufman.

New Business:

--Land acquisition discussion: Tim Fiedler stated that the acquisition of the Petersen Tract, near Eden Valley Park was completed and will be turned over to the Clinton County Conservation Board for management. Tim also stated that Dubuqueland Pheasants Forever and the Eastern Iowa Conservation foundation would be contributing to the acquisition of 164 acres of land adjacent to the Hale Wildlife Area in Clinton County. Bob Walton and Pat Hayes stated that they both have visited the existing Hale Wildlife Area several times and that it provides excellent hunting, fishing, hiking, and other recreational uses for a wide variety of outdoor enthusiasts. Brad Morman, director of the Clinton County Conservation Board addressed the Society and stated that the proposed addition to the Hale Area, currently known as the McCormick Tract, also contains unique natural communities such as a prairie savanna, wetlands, and lowland forest, with many rare plants and animals. Matt McQuillan also addressed the Society Board and stated that he is in the process of seeking donors to complete the purchasing of the property and requested a donations from the D.C.C.B. Following discussion, Connie Kintzle moved with a 2nd by Punkie Birkel that the Society donate up to a maximum of \$275,000.00, if needed, to complete the transaction. Motion passed unanimously.

--Election of officers: Slate for approval is President-Mark Kaufman, Vice-president-Paul Kaufman, Treasurer-Connie Kintzle, Secretary-Bob Walton

The next meeting will be at 6:00 pm on Tuesday, January 12, 2021, via ZOOM.

Adjournment: Meeting adjourned at 6:38 pm on a motion by Birkel, and a 2nd by Rettenmeier.
Respectively submitted,
Bob Walton, Secretary

Cleaning Iowa's Waters with Saturated Buffers in Iowa Watersheds

By Isenhart and Jaynes
Submitted by Connie Kintzle

Editor's note: Due to the length of the article I only highlighted the 27 items in the article. It's very informative if you are interested in Drainage Water Management.

Subsurface tile drainage is an essential water management practice on many highly productive fields in the Midwest. However, nitrate carried in drainage water can lead to local water quality problems and contribute to hypoxia in the Gulf of Mexico, so strategies are needed to reduce the nitrate loads while maintaining adequate drainage for crop production.

Practices that can reduce nitrate loads on tile-drained soils include growing winter forage or cover crops, fine-tuning fertilizer application rates and timing, bioreactors, treatment wetlands, and modifying drainage system design and operation. Drainage water management is one of these practices and is described in the **fact sheet** listed below. Answers given here apply specifically to Midwest corn and soybean cropping systems, and not to perennial or winter annual crops.

Fact Sheet <https://naturalresources.extension.iastate.edu/files/encyclopedia/files/wq-44.pdf>

Below are the topics described in this article.

1. What is drainage water management?
2. Is drainage water management the same as subirrigation?
3. What fields are most suitable for drainage water management?
4. How many acres can I manage with one structure?
5. How much management is required?
6. How do I manage the outlet?
7. Do I need a pump for drainage water management?
8. When is it possible to retrofit an existing system?
9. Will I need more drain tile (narrower spacing)?
10. What yield impact can I expect?
11. How much less nitrate flows into ditches and streams?
12. Can I use less nitrogen fertilizer?
13. Where does the rest of the nitrate go?
14. How does drainage water management affect soil quality?
15. Will earthworms be affected?
16. Will the practice cause blowouts?
17. Will drainage water management cause tile plugging?
18. Will tile freeze?
19. Will my neighbors be affected?
20. Will surface runoff, erosion, and the loss of other chemicals be increased?
21. Will manure application be affected?
22. How much does drainage water management cost?
23. What is the life of a water control structure?
24. What crop varieties work best?
25. How is the application of other conservation practices affected?
26. Who will help pay for the practice?
27. Where can I get more information?

Climate Change: How Do We Know?

From <https://climate.nasa.gov/evidence/>

Submitted by Connie Kintzle

To read the complete article, click on the “From” link above

This graph, based on the comparison of atmospheric samples contained in ice cores and more recent direct measurements, provides evidence that atmospheric CO₂ has increased since the Industrial Revolution. (Credit: Luthi, D., et al., 2008; Etheridge, D.M., et al. 2010; Vostok ice core data/J.R. Petit et al.; NOAA Mauna Loa CO₂ record.) [Find out more about ice cores](#) (external site).

Earth's climate has changed throughout history. Just in the last 650,000 years there have been seven cycles of glacial advance and retreat, with the abrupt end of the last ice age about 11,700 years ago marking the beginning of the modern climate era — and of human civilization. Most of these climate changes are attributed to very small variations in Earth's orbit that change the amount of solar energy our planet receives.

The current warming trend is of particular significance because most of it is extremely likely (greater than 95% probability) to be the result of human activity since the mid-20th century and proceeding at a rate that is unprecedented over decades to millennia.¹

Earth-orbiting satellites and other technological advances have enabled scientists to see the big picture, collecting many different types of information about our planet and its climate on a global scale. This body of data, collected over many years, reveals the signals of a changing climate.

The heat-trapping nature of carbon dioxide and other gases was demonstrated in the mid-19th century.² Their ability to affect the transfer of infrared energy through the atmosphere is the scientific basis of many instruments flown by NASA. There is no question that increased levels of greenhouse gases must cause Earth to warm in response.

Ice cores drawn from Greenland, Antarctica, and tropical mountain glaciers show that Earth's climate responds to changes in greenhouse gas levels. Ancient evidence can also be found in tree rings, ocean sediments, coral reefs, and layers of sedimentary rocks. This ancient, or paleoclimate, evidence reveals that current warming is occurring roughly ten times faster than the average rate of ice-age-recovery warming. Carbon dioxide from human activity is increasing more than 250 times faster than it did from natural sources after the last Ice Age.

The evidence for rapid climate change is compelling:

Global Temperature Rise

The planet's average surface temperature has risen about 2.12 degrees Fahrenheit (1.18 degrees Celsius) since the late 19th century, a change driven largely by increased carbon dioxide emissions into the atmosphere and other human activities.⁴ Most of the warming occurred in the past 40 years, with the seven most recent years being the warmest. The years 2016 and 2020 are tied for the warmest year on record. [+ MORE](#)

Warming Ocean

The ocean has absorbed much of this increased heat, with the top 100 meters (about 328 feet) of ocean showing warming of more than 0.6 degrees Fahrenheit (0.33 degrees Celsius) since 1969.⁶ Earth stores 90% of the extra energy in the ocean. [+ MORE](#)

Shrinking Ice Sheets

The Greenland and Antarctic ice sheets have decreased in mass. Data from NASA's Gravity Recovery and Climate Experiment show Greenland lost an average of 279 billion tons of ice per year between 1993 and 2019, while Antarctica lost about 148 billion tons of ice per year.⁷

Image: Flowing meltwater from the Greenland ice sheet [+ MORE](#)

Glacial Retreat

Glaciers are retreating almost everywhere around the world — including in the Alps, Himalayas, Andes, Rockies,

Alaska, and Africa.⁸

Image: The disappearing snowcap of Mount Kilimanjaro, from space. [+ MORE](#)

Decreased Snow Cover

Satellite observations reveal that the amount of spring snow cover in the Northern Hemisphere has decreased over the past five decades and the snow is melting earlier. [+ MORE](#)

Sea Level Rise

Global sea level rose about 8 inches (20 centimeters) in the last century. The rate in the last two decades, however, is nearly double that of the last century and accelerating slightly every year.¹⁰

Image: Republic of Maldives: Vulnerable to sea level rise [+ MORE](#)

Declining Arctic Sea Ice

Both the extent and thickness of Arctic sea ice has declined rapidly over the last several decades.

Image: Visualization of the 2012 Arctic sea ice minimum, the lowest on record [+ MORE](#)

Extreme Event

The number of record high temperature events in the United States has been increasing, while the number of record low temperature events has been decreasing, since 1950. The U.S. has also witnessed increasing numbers of intense rainfall events. [+ MORE](#)

Ocean Acidification

Since the beginning of the Industrial Revolution, the acidity of surface ocean waters has increased by about 30%. This increase is the result of humans emitting more carbon dioxide into the atmosphere and hence more being absorbed into the ocean. The ocean has absorbed between 20% and 30% of total anthropogenic carbon dioxide emissions in recent decades (7.2 to 10.8 billion metric tons per year).

Conservation Society property partnerships

Submitted by Connie Kintzle and Tim Fiedler

A successful partnership with the Dubuque County Conservation Society and the Iowa Chapter of the National Wild Turkey Federation has led to the DNR being able to permanently protect 20 acres of forested land that connects to the existing approximately 800- acre Ram Hollow Wildlife Management Area. Curt Kemmerer, an Iowa DNR wildlife biologist, feels like the Dubuque County Conservation Society deserves the bulk of the credit on this one, being the leader in trying to protect natural resources within the county. This property just east of Colesburg offers the public a place to hunt or just enjoy nature.

Dubuque County Conservation Society, participated in the purchase of land in Jones County know as Oxford Junction property by partnering with other groups including Dubuque Land Pheasants Forever, Twin Rivers Pheasants Forever and a grant from the Iowa Parks to People program. The purchase of these properties was facilitated by Matt McQuillen of Anamosa. To visit the Duling Farm-Oxford Jct which is just north of the town of Oxford Junction take County Road X64 and follow B Street to the property. This property is also open to the public for hunting or recreation.

The Leifker Wildlife Area, of approximately 96 acres, is located six miles south of Cascade on Hwy 136, right before the Maquoketa River on the right side of the road, and bordered to the West by land acquired by the Jones County Conservation Board and the Iowa Heritage Foundation. The property is bordered by the Maquoketa and is also open to the public.

The most recent property acquisition was the Peterson Wildlife area 206 acres that will tie together the Jackson County 201 acre Eden Valley and Clinton County 198 acre McAndrews Habitat Areas creating a contiguous 605-acre area for public enjoyment of camping, hiking, walking and 404 of the acres for public hunting. The rolling topography of the Petersen Addition will feature restored tallgrass prairie, mature woodlands, and ponds. The property's beauty and diversity support a wide range of wildlife including pheasants and quail, turkey, deer, waterfowl, and non-game species. Eden Valley isn't open for hunting but is a beautiful area to just enjoy nature. Check out Eden Valley online at <https://www.mycountyparks.com/county/Clinton/Park/Eden-Valley-Refuge.aspx>. GPS address is 1415 50th Ave. Baldwin, Iowa 52207, which is approximately 2.5 miles south of Baldwin, Iowa, on 50th Ave.

A good time to visit these properties is in the summer months since the properties are open to the public for hunting from September 1 through April 30.

Oxford Junction work Day

Submitted by Pat Hayes

**Pruning Your Trees**

Submitted by Connie Kintzle

There were 10 people working at the Oxford Junction wildlife area on January the 18th. Volunteers from Pheasants Forever and the Conservation Society joined several DNR personnel in removing undesirable trees that were spreading into the prairie and wetland areas. Another work day is planned for January 28th at White Water Canyon. Pictured from Left to right; Curt Kemmerer Iowa DNR, Pat Hayes, Tim Fiedler, Rich Fiedler, Mark Schnieder, Dan Ostandorf, Justin Beagle, Paul Kaufman and Mark Kaufman. Not pictured, Monty Scheckles, Mattie Scheckles

When to prune

Unlike humans, who repair, replace, restore, and regenerate wounded tissue, trees and shrubs respond to any wound, including those inflicted during the pruning operation, by “walling-off” or compartmentalizing injured tissue. Once these areas are walled-off, the isolated wood dies, but the rest of the plant is protected from decay-causing pathogens and rot. Because this wound response takes place most rapidly just before the onset of growth in the spring when energy reserves are at their highest, the late dormant season (February to March) is commonly regarded as the “best” time to prune. This also is a time when woody plants will not have to cope with opportunistic insects and disease-causing pathogens. Also, absence of foliage makes it easier to view the general structure of deciduous trees and shrubs, and facilitates the removal of appropriate branches.

Maple, elm, birch, and fruitless mulberry often experience sap flow or “bleeding” from pruning wounds made in late winter or early spring. Although sap flow is not injurious to trees, it may bother the homeowner. Pruning in early to midsummer, after the leaves have matured, will prevent unsightly sap flow.

Pruning can be accomplished at other times of the year with little negative consequence. In fact, pruning to remove broken, dead, or diseased branches should be done as soon as these defects are noticed. But there are two exceptions. Pruning should not take place in the spring when leaves are forming because energy reserves are low and the bark “slips” or tears easily at this time. Autumn pruning, particularly during the period when leaves are falling, also should be avoided because this is when new absorbing roots are forming, and the wound response drains energy from this important period of growth.

Making the cut

Contained within the branch collar (the flared base of most branches), is an important barrier or protection zone that prevents the spread of decay into the trunk or parent branch. The branch collar and raised strip of bark, the branch bark ridge, mark this important boundary between the branch and trunk.

Pruning cuts that injure or eliminate the collar destroy the protection zone, leaving vulnerable tissues open to invasion and infection. Therefore, the proper pruning cut should be made to the outside of the branch bark ridge and collar. Flush cuts must be avoided because they violate the protection zone and leave large wounds that are difficult for trees and shrubs to defend.

When removing larger limbs (diameter exceeding 1 inch), use a three-cut technique to prevent the branch from tearing away as it is being removed.

The initial cut is made on the underside of the branch, 6 to 12 inches from the trunk, about a third to halfway through the limb. The second cut is made on the top of the branch, 1 inch further out. As the second cut is made, the weight of the branch will cause it to break at the pivot point between the two cuts. Once the branch falls, the third and final cut is made outside the branch collar.

For more information and diagrams download <https://store.extension.iastate.edu/product/6191>

Spring is just Around the Corner

Submitted by Connie Kintzle

In a few short months spring will be here. If you are a home gardener you might be interested in some of the YouTube videos created by Dubuque County Extension's - Ray Kruse Food Systems Program Coordinator and Master Gardner Coordinator

View them at: <https://www.extension.iastate.edu/dubuque/yard-gardenhorticulture>

The value of the Upper Mississippi River

Submitted by Pat Hayes

The Upper Mississippi River generates \$345 billion annually, provides over 643 million gallons of water per day for domestic and industrial uses along its 133-county corridor, and supports a \$673 million shipping industry.

But so much industry comes at a cost.

Tourism and outdoor recreation along the river generate roughly \$25 billion annually and support more than 420,000 jobs.

People are drawn to the Upper Mississippi River for its scenic vistas and wildlife experiences. The Mississippi is a globally significant flyway used by hundreds of species of birds and provides unique habitat for fish, mussels, reptiles, amphibians and mammals.

From Grass to Garden, Simple steps to growing your own food.

Submitted by Nicole Klinge

Many people become overwhelmed or don't know where to start with backyard (or front yard) gardening. In this class you will be guided each step of the way and introduced to many ideas, techniques, and visual images to get inspiration and knowhow for your own garden. All topics pertaining to organic gardening will be explored and there will be clear guidance on when and what to do to ensure success. Class prices are \$15 per session or \$40 for the whole series.

#1, Feb 27, 10:30-12

How to begin?

Creating a garden plan

Techniques for creating healthy soil

Seed starting indoors

#2, March 27, 10:30-12

Planting time

Techniques for preparing the soil for planting

What to plant early spring

Tools and spacing for planting

#3, April 24, 10:30-12

How to maintain?

Plants for shade

Vertical gardening- Trellising

Mulching and watering techniques

Planting summer crops

Pest control More info or to sign up at soulsidehealingarts.com (go to the calendar for Feb 27) or contact Nicole at ecoart2012@yahoo.com

Events Calendar

Swiss Valley Nature Center/EB Lyons/Audubon Society/Hurstville Calendars

All programs are subject to weather conditions. To check for changes to this schedule, check the websites in the list of organizations below. The programs are open to the public and are designed for people of all ages unless otherwise described. For additional info or preregistration contact one of the following depending on the program's location:

Swiss Valley Nature Center, 13606 Swiss Valley Road Peosta, IA 52068, 563-556-6745.

<https://www.facebook.com/dubuquecountyconservation>

EB Lyons Interpretive Center, 8991 Bellevue Heights, Dubuque, IA at 563-556-0620. www.minesofspain.org

Hurstville Interpretive Center, 18670 63rd Street, Maquoketa, IA at 563- 652-3783. www.jacksonccb.com

Dubuque Audubon Society, P.O. Box 3174, Dubuque, IA 52004-3174, 563-582-215. www.audubondubuque.org/

[Convivium Urban Farmstead](#)

Other Events Calendar

Winter Farmer's Market Saturday, 9am-noon Kennedy Mall (West Concourse, next to Planet Fitness)

Company Sponsors

Please support our local sponsors

<i>All Seasons Heating</i> 798 Cedar Cross Rd	<i>Environmental</i> <i>Management Services</i> 5170 Wolff Rd	<i>Oky Doky Food Mart</i> P.O. Box 300	<i>Steve's Ace Home and</i> <i>Garden</i> 3350 JFK 200 South Locust
<i>MidWest One Bank</i> 895 Town Clock Plaza	<i>Sherry Horsfield</i> <i>Farm Bureau Insurance</i> 20214 E Pleasant Grove Rd	<i>O'Meara Custom</i> <i>Products</i> 8915 N. Badger Rd.	<i>TFM Co.</i> 2040 Kerper Blvd.
<i>Artistic Cleaners</i> 107 Locust St.	<i>Home+Floor Show</i> 1475 Associates Dr.	<i>Organic Valley</i> <i>Dickeyville WI</i>	<i>Therapeutic Massage</i> 2255 JFK Road
<i>Brennan Baumhover Ins.</i> 2615 Dodge St.	<i>The Friedman Group</i> 880 Locust St. P. O. Box 1780	<i>Pfohl's Blinds, Drapes Inc.</i> 335 West 1st Street	<i>U.S. Bank</i> 270 West 7th
<i>Dennis Baumhover Ins.</i> 2615 Dodge St.	<i>Leo H. Frueh, Consulting</i> <i>Forester</i> Email: fruehforestry @gmail.com	<i>Pregler Electric</i> 216th Ave LaMotte IA	<i>Weber Paper Co.</i> 4300 Chevenelle Dr.
<i>Behr's Funeral Home</i> 1491 Main St.	<i>Hendricks Feed Co.</i> 880 Central	<i>Premier Bank</i> 1975 JFK Rd.	<i>White Front Feed & Seed</i> 4290 Dodge St.
<i>Breitbach's Country</i> <i>Dining</i> 563 Balltown Rd.	<i>Herbst Upholstery & Auto</i> 76 Main St	<i>Schuster Heating & Pump</i> 15674 Key City Lane	<i>White Water Native Seeds</i> Epworth, IA
<i>Cedar Cross Overhead</i> <i>Door</i> 1040 Cedar Cross Rd	<i>IIW Engineers &</i> <i>Surveyors P.C.</i> 4155 Pennsylvania	<i>Schuster Tree Service</i> 7273 Schueller Heights Rd	<i>Zuccaro Dental</i> 895 Main St suite 900
<i>Citizens State Bank</i> P.O. Box 50 New Vienna	<i>Kaufmann Painting</i> 17368 S John Deere Rd.	<i>Schwartz Plumbing</i> 4904 Asbury	
<i>Copper Kettle</i> 2987 JACKSON ST	<i>Klauer Optical</i> 1705 Delhi St.	<i>Sisters of Saint Francis</i> 3390 Windsor Ave.	
<i>Dupaco Credit Union</i> P.O. Box 179	<i>Miller Flooring</i> Box 125 New Vienna	<i>Skip Breithbach Feed</i> Balltown, IA	
<i>DuTrac Credit Union</i> 3465 Asbury	<i>Nature's Way Lawn Care</i> 440 Burch St.	<i>Spahn & Rose Lumber Co.</i> 250 Harrison St	
		<i>Stecklein Tree Service</i> Epworth, IA	

Board Members 2021

Name	Title	563 except as noted	Name	563 except as noted
Mark Kaufman	President	879-3452	Gerda Preston Hartman	588-0649
Paul Kaufman	Vice President	583-5030	Whitey Kemp	582-7752
Connie Kintzle	Treasurer		Punkie Birkel	
Bob Walton	Secretary		Dan Simon	583-0514
Tom Klinge	Newsletter	815-747-7786	Pat Hayes	542-2960
			Bev Rettenmeier	

Dubuque Co. Conservation Society
P. O. Box 645
Dubuque, IA 52004-0645

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Or Current Resident
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Reminders:

There currently are no plans for the next public meeting until the Coronavirus has been eradicated. Check back on our webpage or Facebook page. See below to access these.

Check the event calendars for some exciting things to do.

Support your local Farmer's Markets. Support our local Sponsors

This months insert - None

This month's focus - None

Change your furnace filter.

Recycle whenever possible.

Visit our web page at www.dbqccs.org

- OR -

Visit our Facebook page:

<https://www.facebook.com/pages/Dubuque-County-Conservation-Society/421655257997596>

or you can search for "Dubuque County Conservation Society Facebook".