

The Nature of Things

THE BENTON COUNTY CONSERVATION BOARD QUARTERLY NEWSLETTER

VOLUME 7 SPRING 2015

In Defense of Dandelions *By Karen M. Phelps*

The dandelion, *Taraxacum officinale*, is considered, by most people, a weed. In my family, and much of the Amana Community where I grew up and still reside, dandelions were a source of food, fascination, and income. Every spring, prior to the dandelions flowering, my mother would dutifully send my sister and I out into the yard to pick the first tender greens of the dandelions. From this, Mom would concoct the most flavorful salad - Zigorrie Salat-German for dandelion salad.



Shortly there after, once the bright yellow blossoms burst forth with their joyous shouts of spring, my sister and I were once again among the dandelions, this time harvesting the blossoms by the gallon, only to race off to the nearest winery to be paid a whopping twenty-five cents a gallon for the delicate blooms. We thought that was easy money; spending the day outdoors in the sunshine and getting paid at the same time. Last year, those gallons of dandelion blossoms brought \$5.00 a gallon. The wineries, of course, used the dandelions to produce a most enjoyable sensation for the palate - dandelion wine.

For many people today, a pristine yard, meticulously landscaped with hand-selected annuals or non-native perennials, seems to bring optimum joy to the home owner as well as perhaps, passers-by. Nary a dandelion or stray violet dare to grow in such an environment - alas, to be plucked from it's habitat, only to be discarded among the curbside rubbish with the rest of unwelcome intruders. Then there is my yard. Dandelions waken to the rising sun, bursting forth with all their vibrant color. Native prairie grasses and flowers call out to the pollinators and common milkweed stands like a beacon among them, signaling to the Monarchs "come, lay your eggs right here". About once a year, if I'm lucky, I tend to the flower beds and pull out the creeping Charlie (sorry Charlie), as well as a few thistles that catch me off guard when I'm barefoot in the yard. My grandson has discovered the yellow blossoms, and so our family frequently adorn yellow pollen patches on our faces and the back of our hands.

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Welcome Baby Girl Geiger.
January 19, 2015
Proud Parents
Jon and Melissa.

Electronic versions are
available at our website or via email
through the
following website:
www.bentoncountyparks.com
or call us at:
319-472-4942 to be added
to our mailing list.



AmeriCorps: Getting Things Done *By Zach Parmater, Conservation Technician*

NCCC and FEMA Corps have been an invaluable asset to the Benton County Conservation Department. I have been working with Benton County Conservation since 2006 and in that time I have had the pleasure of working with numerous AmeriCorps NCCC and FEMA corps teams, completing many different tasks. As a seasonal employee, I worked with an NCCC team at Hannen Lake clearing an 8.6 acre hillside of woody vegetation. The vegetation was both native and non-native species that were being removed for a multitude of reasons. First, they were impeding the view of the lake from the highest camping pads around the lake. More importantly, this array of woody vegetation was dense and creating an almost 100% canopy, choking out any and all plant life below. The bare soil beneath was left exposed to the elements such as rain fall making it more susceptible to erosion. For two weeks the NCCC team, one other Conservation employee and I worked diligently to clear this area. A lot of blood, sweat, and tears went into the collection of tasks we completed. At one point it became a daily event comparing the cuts and scrapes at lunch time, while we sat devouring our lunches trying desperately to refuel our aching bodies. The amount of work completed in the short time span was absolutely mind blowing. The young men and women that I worked with were from all different walks of life and from all over the United States. We found common ground and worked diligently together, all having an understanding and passion for the task at hand.

The flash floods of 2013 brought a FEMA Corps team to help clear log jams from beneath the largest bridge on the Old Creamery Nature Trail (OCNT), just east of Garrison. We worked all day on this project, some of us standing in chest deep water sawing logs that were tangled and twisted amongst the bridge pylons. It was a daunting task to say the least. As we worked, we bared down and gritted our teeth as we trudged through the mud, fought the mosquitoes, and completed the task. The project seemed insurmountable at first glance, but it was completed in less than 8 hours. The expression “many hands make light work” only holds true if the many hands are working hard and working together. It has been my experience with every team that the saying mentioned above holds true.

Fall of 2014, we received two NCCC teams for a three day project. We utilized the team by clearing the backside of the dam structure at Rodgers Park. We spent two days clearing woody vegetation such as autumn olive, honey suckle, and locust trees that had all but taken over the structure. Iowa DNR guidelines dictate that woody vegetation must be removed from all areas of a dam down to the foot of the structure. This prevents roots of trees from channeling toward the lake, especially in drought conditions. Roots also create an avenue for water to begin its path, undermining the dam structure.

There have been other teams that have graciously assisted our department throughout the years. I could go on and on, but it would be a daunting task for our editor to try and fit everything in our newsletter. The current NCCC team, Oak 5 as they are known, started a project with our department on March 11th of this year. I spent a day briefing them on the history of Benton County Conservation. I familiarized them with our department and projects and tasks our organization has accomplished since its birth in 1956. The main focus of this project will be the removal of woody vegetation on the OCNT. This will not only promote safe multi-directional use of the trail, but also help control undesirable species. After the damage from the windstorm in 2011, it has been difficult for Benton County Conservation staff to maintain our nature trails. Once debris (fallen and damaged trees and brush) is cleared, our department will have the ability to maintain the areas with our newly purchased equipment and mowers.

Oak 5 has also been tasked with assisting with the improvement of a tree planting area at Rodgers Park. We have made great improvements in this area, removing honey suckle and autumn olive as well as thinning the timber stand to promote a healthier and more diverse population of desirable trees. Oh and let's not forget ridding the area of storm damaged trees from the Derecho of 2011!

Tilford Students Show They Care in February



Benton County Naturalists Karen Phelps and Aaron Askelson were presented with a check in the amount of \$450.00. The contribution was made to the Benton County Conservation Foundation to be used for the further development of programming at the Nature Center. Kim Isbell, second grade teacher at Tilford Elementary in Vinton, stated she'd wanted to do something for the environmental education program in Benton County for quite some time. Mrs. Isbell's class designed posters and hung them throughout the school building in the month of February - the Caring month - they challenged the entire student body as well as staff to dig into their pockets and empty out their change. A collection jar was placed in the office to collect the change. Friday the 13th

of March, turned out to be a very lucky day for the Conservation dept., when students and faculty presented the check to Karen and Aaron.

Phelps told Isbell that after doing a program at the school the day before, one of the second graders came up to her and asked it was too late to donate to the Nature Center fund. He then opened his coin clutch and dug out \$0.36. "He could have handed me a \$100.00 bill and it wouldn't have meant as much as that sincere amount of \$0.36".

Phelps and Askelson agreed: "We enjoy our jobs, the students, and all the people we get to work with. It's these unexpected random acts of kindness that drive us to keep going". Thank you everyone and Tilford Elementary!

Benton County Naturalists Receive Bohumil Shimek Award

Your Benton County Naturalists, Karen Phelps and Aaron Askelson were recently awarded the Bohumil Shimek Award for Outstanding Efforts by an Environmental Educator. Karen and Aaron were presented with the award at the county conservation employees (IACCBE) statewide meeting in Waterloo this past January. The award, presented by the Iowa Association of Naturalists and the Iowa Environmental Education Coalition, recognizes formal or non-formal educators for innovative EE programming beyond his/her job expectations. This one-time award recognized Karen and Aaron for their outstanding efforts in designing and constructing several major displays in their nature center while still continuing to offer county-wide programming to the schools and public. If you haven't been to the nature center in awhile, stop by and check out these award winning displays.

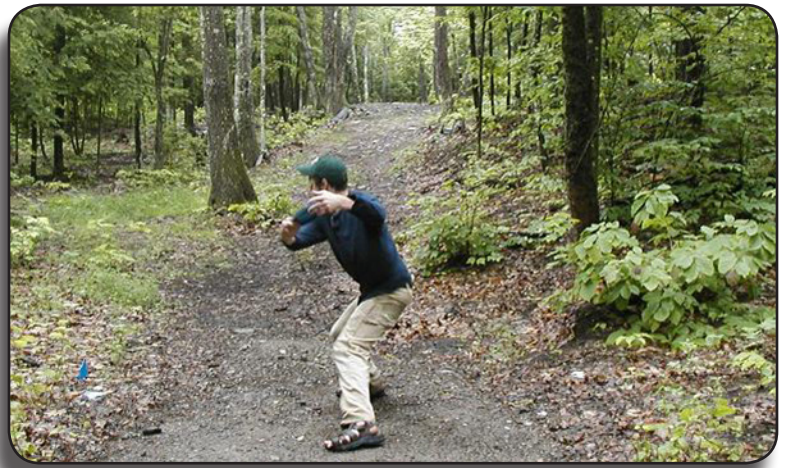


Aaron and Karen presented with Bohumil Shimek award

Wildcat Disc Golf: A Treasure Among the Trees *By Kelly Williams, Volunteer*

The sun rises through the tall pines in the East, projecting a golden hue that spreads across the beautiful landscape. The dew on the grass glimmers like fresh cut diamonds. A meandering stream provides the background music for the voices of many a songbird. An owl calls out for its mate in a signature throaty hoot. Turkey vultures have taken flight, circling on high, inspecting all that lies below. Another glorious morning is under way at the Wildcat Bluff Recreational Area. The scene is set for another day of brotherhood at the Wildcat Bluff Disc Golf Course. The day ahead will provide abundant hours of enjoyment for the disc golfers that adore the park, a park that some had spent their childhood in. To better understand the comradery of the present day, we must look back at the origins of how the disc golf course came to be.

It all started circa 1980 when a group of friends started playing catch with Whamo Frisbees at Wakema Park in Center Point. After a while, playing catch got old and they decided to try something different, design a Frisbee golf course in the park. Nine holes were laid out using light poles, a burn barrel, fence posts, trees and even a water fountain for the targets or holes. This was much more fun than just playing catch and they actually thought they had invented a new game! Little did they know, though, that the game of disc golf had already been invented some years before. The discovery of a couple disc golf courses located near the Coralville reservoir fueled the friends' thirst for this new game. They all caught the disc golf bug and never looked back. They also decided, at that time, to give back and lead many volunteer work days on the local Cedar Rapids courses. They realized that as much as they loved playing the game, they enjoyed the design and maintenance side of disc golf as well.



Fast forward to 1998 when the friends decided to bring a couple moveable disc golf baskets with them during a weekend campout at Wildcat Bluff. The baskets were set up roughly 300' apart in an open area of the park and they would throw back and forth between them. The next year they went a little further with the idea and decided to get a couple more baskets and throw up into the woods and then back down using the main trail above the old outhouse. With the addition of more baskets in mid-2000 the first "loop" course was played. The course played from above the outhouse, on a trail, to where it exits near the turnaround by the walk bridge. This temporary course now consisted of 9 holes. In 2001 the idea was expanded to include much of the area that is now the permanent course front nine, located in the southwestern portion of the park. They were now setting up an 18 hole course two times per year in May and July. In the year 2002, a fall Wildcat Bluff weekend was added with a course set up in the area between the now removed #1 campsite by the kiosk and the boat dock. In 2006 the passing of one of the regular "Wildcat Bluff Discers", Rick Hutchins, made the group realize that the time had come for a permanent course and with the blessing of the park ranger the idea came to fruition. Rick was instrumental in the beginning of the idea and was at almost every Wildcat Bluff weekend. The course is a memorial to Rick and the spirit that he brought to the game of disc golf. In the spring of 2007 the first 9 holes were installed and in November 2007 the course was completed with 21 holes. The "Wildcat Bluff Crew" has donated the entire course and is dedicated to maintaining it.

Maintaining the course took on a whole new meaning in July of 2011. On July 11th, an estimated 120 mph straight wind blew through much of Benton County, including Wildcat Bluff. The storm damaged or destroyed hundreds of trees rendering familiar landscape unrecognizable. Most of the damage was concentrated on the northern hill where holes 10 through 18 are located. Every hole on that hill was unplayable.

From the Director's Desk *By Matthew Purdy, Director*

Often people say to me: "Aren't you glad the busy season is done with?" They logically think that conservation is a mostly three season job. However in most cases, this is not true anymore. Granted there are certain parts of the job that pick up in the summer months, but for the most part I am stuck with my tail in a chair grinding out the day. Although my job is very rewarding and always different, I have to be honest and say to everyone I get a bit jealous when I see our naturalists & park rangers head out to work in the parks or schools. I sometimes wish that I could trade in 20 hours of seat time for some hard work in the field, but alas, I know that I have a great job and that I can make a big difference if I stay the course and I am very content in that realization.

My office window can often serve as the greatest relief of my day. For instance, this year alone I have seen squirrels, song birds, deer, turkey, mink, opossum, skunks, rabbits, pheasants, a hawk eating a bird, a screech owl seeking shelter in a tree, and amazingly, even an eagle catching a squirrel for lunch. Many times I feel the greatest thing that anyone can do for conservation is to be passionate and utilize the outdoors in an ethical way. View it, be in it, and get away from that desk and TV at home. Bring yourself to a newly found appreciation of Iowa outdoors this year, by exploring some new areas.



The majestic Bald eagle snags its supper off the road outside the Benton County Nature Center this past February. The squirrel, having spent the day gorging itself at our bird feeders, made for a wholesome meal for the eagle and it's family.

Photos by Matthew Purdy

Benton County's Owl by Coralee Bodeker

When I first got word of the rufous morph Eastern Screech-owl at the Benton County Conservation Center (BCCC) in early February, I was rather excited as it is estimated that only 30% of all Screech-owls are this reddish-brown color (rufous) and those are usually found in the eastern states. This was rather a rare sighting for Iowa. And thus, one bone-chilling morning we decided to brave the frozen, drifting roads of Benton County and see what we could see. The

maple tree in which the tiny owl had recently been spotted stood tall directly behind the BCCC and the perfectly circular cavity in which the owl decided to roost was directly beyond the BCCC's back office windows. At first I tried locating the owl from the parking lot, but only caught a fleeting glimpse of the bird's left ear tuft before it vanished deeper into its lair. The wind was picking up and had a rough bite; I entered the building. The Conservation Director kindly let me invade his office, but even with a perfect view the cavity remained empty. I spent the next 30+ minutes pacing about the Center, frequently checking the cavity for movement. As the time for my departure drew near, the Naturalist and I played a very brief Screech-owl call through the office's cracked window. The call was a high trill that



sounded a lot like the whinny of a horse. The owl leisurely edged into partial view and I scrambled to digiscope a few photos from atop the Director's desk. While marveling at the owl's beauty through the scope, it continued moving towards the edge of the cavity opening. Once in full view, its rufous feathers ruffled in the wind and shown clearly in the bright midday sun. I was amazed to have found something so interesting in basically a backyard and yet here it was—a beautiful, pint-sized owl tucked away, deep in a tree cavity and for how long had it been there in secret before being spotted? It seems that the birds we find the most striking, the most impressive, the most awe-inspiring often prove the hardest to track down.

Nature's most noteworthy

things aren't necessarily looking for our attention, but the sight of something so remarkable can inspire us to look for beautiful things everywhere. Even in deep, dark holes. * * * 'A Prairie Girl's Notebook' is inspired by 'A Naturalist's Notebook' penned by John Schmitt & found in the Cornell Lab of Ornithology's Living Bird journal.



THE IMPORTANCE OF

Native Pollinators

By: Ben Bonar
Roadside Manager

Iowa is home to a multitude of native pollinators. Each fills a unique role in our ecosystem with some being more specialized than others. Unfortunately, many of these native insects are in decline due to habitat loss and other factors which makes their conservation extremely important.



One species that has received a lot of press lately is the Monarch Butterfly. Monarchs require native milkweed plants to grow and reproduce and we have seen a loss of over ~1.06 billion milkweed plants since 1999. It is estimated that the current milkweed population in Iowa is around 711 million today. With this loss in milkweed has come a sharp decline in the number of monarchs. The monarch population today is roughly 6% of what it was in 1996. This decline has been so drastic that there has been talk of listing the monarch butterfly under the endangered species act.



Native bee populations have also taken a dive in recent years. This again can be contributed to a lack of habitat. Approximately 90% of native pollinators require native plants to reproduce. With fewer and fewer native plants on the landscape it makes it very difficult to preserve these populations.



Monarch Butterfly on Whorled Milkweed



Bumble Bee on Liatris



Fortunately for us there is a very simple way that we can solve these issues. Putting more native plants on the landscape is a sound strategy to reverse these trends. You can do this yourself on a small scale by introducing native plants into the landscaping around your home.

Monarchs, for instance, love milkweed plants. There are several varieties of milkweeds that do well in native landscaping projects such as Butterfly Milkweed, Purple Milkweed and Rose Milkweed. Planting any of these will draw monarchs and help their population recover.

Native bees also have preferred plants. Research from the University of Iowa has shown that native bees frequent Lead Plant, Purple Prairie Clover, Golden Alexanders and Greyheaded Coneflower. Stiff Goldenrod, Prairie Coreopsis, Culvers Root and Oxeye Sunflower are also important plants for native bee conservation.

Benton County actively plants native vegetation in the right-of-way (ROW) of the county secondary roads system. This program is called Integrated Roadside Vegetation Management (IRVM). This has allowed us to reconstruct prairie on ~6% of the county's ROW and we continue to add more each year.

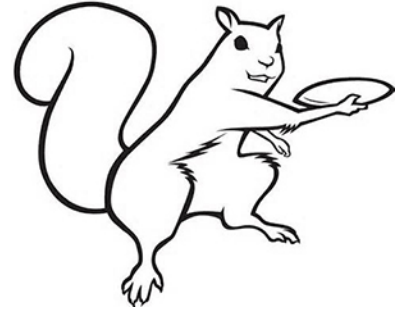
If you are interested in learning more about native pollinators, native plants or have questions about how to start a native landscaping project feel free to contact me at any time.

- Ben Bonar, Benton County Roadside Manager, 319-472-2211

Disc Golf: Treasure Among the Trees *Continued from page 4*

Surprisingly, with all the downed trees, there were no disc golf baskets destroyed. The volunteer crew, with the help of many in the disc golf community, started the cleanup process and got the course playable by the annual tournament in October 2011. Clean up of the massive damage is finally nearing completion four years later. With the dedication of a core group of volunteers, Wildcat Bluff disc golf course has become what many consider to be the #1 course in Iowa and listed in some publications as top 30 in the world. The trails that wind through the park offer some spectacular nature hiking to disc golfers or anyone who just likes to enjoy the beauty of nature.

In October 2009 the first official “Wildcat Bluff Open” tournament was held. The 2015 version will mark the 7th annual event. Each year the tournament has become one of the must play events in Iowa. The event annually raises funds for park improvements and has resulted in over \$2000 donated to date. This year, due to the popularity and sheer numbers of players, the tournament is expanding to a 2 day event to accommodate all who want to compete. There is also a doubles tournament run every year in early May.



The sun is now setting in the west. The wildlife is starting to calm in the low glow, settling in for the impending darkness of night. The turkey vultures are finding their roosting spots perched among the tall pines. A single owl calls out one last time. The songbirds have now become silent. And as the wildlife goes, so do the disc golfers as they light a campfire that crackles in tune with the nearby stream that remains a constant background song in the valley. They sit around the fire and talk about the shots of the day and how lucky they are to have such a wonderful place to enjoy, a park called Wildcat Bluff.

For more information about Wildcat Bluff disc golf course and Disc Golf, please visit these web sites:

<https://www.facebook.com/pages/Wildcat-Bluff-Disc-Golf-Course/392191570823455>

<http://www.dgcoursereview.com/course.php?id=2011>

<http://www.pdga.com/>

<http://www.innovadiscs.com/>

<http://www.discraft.com/discgolf.html>

<https://www.dynamicdiscs.net/>

AmeriCorps: Getting Things Done *Continued from page 2*

The team completed the construction of 20 Wood Duck boxes and 3 bat boxes during inclement weather days. We hope to have a day to take the team out and place the boxes throughout our parks, improving nesting success for Wood Ducks and affording native bats areas to live throughout the spring and summer months.

Oak 5 assisted with reestablishing a property line at Hoefle-Dulin Park. The area was inundated with honey suckle and storm damage from the 2011 windstorm. I was quite surprised when the team finished the area after only working on it for two half-days. The work completed has been amazing and I can't wait to sit down and figure the square footage of land that has benefited from Oak 5's time with our Department. The AmeriCorps Pledge includes statements like “I will get things done for America,” “I will take action,” and “I will persevere”. And that is exactly what they do. It has been a privilege to work with so many fine young men and women from this great organization over the years. Oak 5, Thank you for all of your hard work. Without you it couldn't have been accomplished. I hope you all take something from this and understand that you have positively impacted the natural resources in Benton County. It truly has been a pleasure “getting things done” with you. I would welcome your team to be a part of ours anytime.

Refurbishing Shellsburg with Native Plants *By Nancy Thorkildson, Guest Writer*

As spring arrives, many of us are looking forward to planting flowers, shrubs and grasses. Typically, flower pots and beds are planted with nursery grown perennials and annuals, many of them developed as hybrids for our planting “zone”, which is zone 5. But long before such “zones” were identified, Iowa was covered with native prairies, forests and wetlands. As Iowa’s state land was converted to agricultural uses, the majority of our native prairies have been lost; reduced to less than .1% of their original size. Statewide, efforts are being made to reintroduce native vegetation and Shellsburg is extremely fortunate to have the restored prairie behind the elementary school.

This summer will provide more opportunities for using native plants in Shellsburg. Plans are underway to create some display beds of native grasses and flowers near the entrance of the new Prairie Forest Trail at the north end of Pearl Street. These will be in mulched flower beds, so while you may not recognize the plant species, it will resemble a more traditional flower bed. Shellsburg Area Community Group (SACG) volunteers are considering labeling these plants so we can all get more familiar with various native plants. The intent is to showcase some of the native species found on the school prairie.

Later this summer, a variety of native shrubs, grasses and flowers will be planted along the streambank in the original city park, located towards the south end of the town. This project is being undertaken in order to decrease erosion along this section of the creek, as well as to create other environmental benefits. Plans call for native shrubs, wildflowers and grasses, among them blazing star, ironweed, swamp milkweed, turtlehead, cardinal flower, rattlesnake master, porcupine sedge and wool grass. (Don’t you just love the common names?) A larger area of the streambank will be seeded with a native wildflower and grass mix with approximately 30 different species. This area will not look like a typical flower bed and it will take a few years to get established as a mixed prairie plot. A certified arborist, Mark Pingnot, is consulting on this project and will be providing guidance to community volunteers who will help with the planting. We also anticipate getting ongoing assistance from the Benton County Conservation staff.

So why plant native species? One of the primary characteristics of native plants is their extensive root structure. Using these plants on the streambank will significantly decrease erosion and the roots help water to be absorbed into the soil, rather than just running off during heavy rains. In this way, we are also improving water quality and the habitat for aquatic species. The deep roots also help to improve the soil quality by adding organic matter and helping the soil retain water. Once established, native prairie plantings require significantly less maintenance than non-native gardens because they have adapted to the area’s climate, soils and insects. Another extremely important advantage of using native plants is the improved habitat for wildlife. Birds benefit, and of particular importance is the improved habitat for pollinators - bees and butterflies - due to their role in the production of food upon which we all depend.

So keep your eyes out for these developments and if you are interested in participating or learning more, contact Jacquie Hodgson, at 472-3127. Jacquie, a Master Gardener, chairs the SACG garden committee and will be providing leadership in these projects. If you love digging in the dirt and planting things, come on out and play!!



A trail volunteer takes advantage of a beautiful day to tidy up the trail.

Dandelions *continued from page 1*



Packed with vitamins, the dandelion is an herbaceous plant that can reach 17 inches in height. Its colorful stem is hollow and its 2 to 10 inch long green, toothed leaves form a rosette at the base of the stem. The dandelion's yellow-orange flower consists of a large number of individual, miniature flowers known as ray florets. The flowers open at dawn and close at night.

Different types of insects pollinate dandelions prior to the yellow flower turning into a white puff ball that consist of large number of fruits called achenes.

The seed of the dandelion has a disk-like extension that acts like a parachute and facilitates dispersal by wind. These seeds can travel 5 miles before they finally reach the ground. It is believed that the name "dandelion" originates from the French words "dent de lion" which mean lion's tooth. This name is given because of the deeply toothed leaves of the dandelion.

Still not convinced that the dandelion is worth having in your yard: The milky liquid produced in the stem contains latex (a substance that is similar to rubber). Scientists have created a new species of dandelion which produces high quality latex in greater amount. This type of latex has potential to replace rubber in the production of tires in the near future. Just think, another market for the incredible, versatile dandelion.

On Saturday, May 9th, wild edibles expert Mike Krebill, will be joining us at the Nature Center to enhance our palate with delectable morsels he's gathered from the wild. Among them is my personal favorite - Dandy Blend ice cream - made from the root of none other than, of course, dandelions! (See insert for program information).

Mike will be providing participants with various wild edible recipes and tastings, but class size is limited, so be sure and register early. In the mean time, I've included the Amana recipe for dandelion salad for you to try and enjoy - after all, the season is now!

Zigorrie Salat (Dandelion Salad)

1 qt. prepared dandelion greens
2 Tblsp. lard or bacon drippings
1 Tblsp. flour
1 cup water

2 Tblsp. vinegar
Salt and Pepper to taste
1/2 cup sour cream
Minced onion or chives, if desired.

Use only young, tender dandelion plants; discard roots and green tips which have a bitter taste. Cut remainder into small pieces and wash thoroughly. Soak in cold water for half an hour. Heat lard over low heat in skillet and blend in flour. Add water and bring to boil. Season with vinegar, salt and pepper and remove from heat.

Add sour cream and onion and pour over drained dandelion greens. Mix well and serve warm.

AmazonSmile?

AmazonSmile is a website operated by Amazon that lets customers enjoy the same wide selection of products, low prices, and convenient shopping features as on Amazon.com. The difference is that when customers shop on AmazonSmile (<https://smile.amazon.com/ch/20-2006699>), the AmazonSmile Foundation will donate 0.5% of the price of eligible purchases to the charitable organizations selected by customers. So please support Benton County Conservation Foundation and use smile.amazon.com **THANK YOU!**

Welcome Fish: Hotels Now Open *By Logan Hahn, Park Ranger*

Have you ever caught a fish and wondered what the odds were that any given fish egg will hatch, survive, and grow into the scrumptious swimming fillets that you love to catch in the clean, crystal-clear, ice-capped water of mid-winter?

A single game fish will lay hundreds, sometimes thousands of eggs during spawning season, because the survival rate of eggs/young fish is so incredibly inefficient. The fish needs to lay an outrageous number of eggs, because *nearly* every one of the eggs will die or get eaten by an aquatic predator. Every time you catch a keeper, the mere fact that it has survived to harvest age is a bit of a statistical miracle.

So, what factors contribute to a fish's survival? This is a question that is explored by thousands of fisheries professionals, as sport fishing is a blast as well as a multi-million dollar industry. Although there are dozens of different factors that can make or break a body of water's ability to produce jumbo eaters, adequate fish structure, fondly referred to as a fish hotel, is recognized by professionals in the fishing industry as one of the most important elements for fish survival. What is it about underwater structure that is so important to fishing? The following are a few highlights to having enough structure in lakes:



Underwater Structure provides necessary habitat for young fish.



Pine trees awaiting spring thaw on the ice will become fish habitat.

Underwater structure is a great place for young fish to hide. If a young fish is lucky enough to survive its egg stage, it now must contend with the predators in its environment. Adult fish, dragonfly larvae, crayfish, kingfishers, and several other aquatic predators voraciously prey on young fish. At this stage in a fish's life, its only line of defense is to have a suitable place to hide.

Underwater structure is a great place for keeper-sized fish to hang out. Although structure does a great job of helping young fish hide, a mature-sized fish knows that it will get lucky once in a while if it hangs out near the structure long enough.

Underwater structure provides a great surface for insect larva (food) to grow on. Until a fish is old enough to eat larger prey, it must rely entirely on plankton and small invertebrates to keep from starving.

Why pay any mind to the welfare of a fish no larger than a finger nail? It is important to remember that today's fishing is only as good as the young-fish survival conditions were five years ago.

Underwater structure automatically makes a great fishing spot. Because fish of all sizes stay close to underwater structure, locating structure is one of the best ways to locate a good fishing spot.

I hope you were able to make it out to Hannen Lake this past winter to go ice fishing. And if you did, I hope this article helped explain the importance of the trees and shrubs nestled on the ice, waiting for thaw.

Conservation Board Members

Dan Hill - Vinton, Member
Jean Ohlen - Blainstown, Chair
Mark Pingenot - Vinton, Member
Denni Randall - Belle Plaine, Member
Randy Scheel - Garrison, Member

The Benton County Conservation Board meets the second Monday of every month at 5:30 at the Nature Center. Meetings are open to the public.

Conservation Staff

Matthew Purdy	Executive Director
Scott Bahmann	Deputy Director/Ranger
Karen Phelps	Interpretive Naturalist
Aaron Askelson	Interpretive Naturalist
Jon Geiger	River Parks Ranger
Logan Hahn	Hannen Park Ranger
Zach Parmater	Conservation Tech

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***Please follow us on Facebook at Benton County Conservation
or visit us on the web at www.bentoncountyparks.com***

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