Great Lakes Park Training Institute

02-25-13 to 02-28-13
Pokagon State Park,
Angola, IN
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Participants from the Great Lakes region gathered in Indiana’s Pokagon State Park February 25-28, 2013 to attend the 67th annual Great Lakes Park Training Institute (GLPTI). GLPTI is a week filled with education, training opportunities, social networking, and a relaxation.

The Great Lakes Park Training Institute is deeply rooted in the heart of the park and recreation training history. In the mid-1940s, amidst the rapid growth of park districts, state parks, and recreation departments throughout the Midwest, an awareness of the need for a professional training program arose. At the invitation of Dr. Garrett Eppley at Indiana University, the summer of 1946 ushered in a meeting of representatives from Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Dr. Eppley proposed an educational institute to include general sessions and detailed workshops. The group supported the idea and arranged for a pilot program in late 1946. A total of 116 delegates attended the pilot program held at McCormick’s Creek State Park in Indiana. The pilot was a huge success and provided much service to those departments in attendance.

The representatives met again, this time adopting the name Great Lakes Park Training Institute, and agreed to continue the program. Throughout the years, the program has been polished and tailored to become what it is today.

The Eppley Institute for Parks and Public Lands at Indiana University administers GLPTI in its current format. Eppley Institute personnel staff GLPTI and work with the Board of Regents to conduct the event.

This document contains the proceedings of the 2013 Institute. Session information, PowerPoint slides, and handouts have been provided for all speakers who submitted the information to the Great Lakes Park Training Institute.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Welcome to the Great Lakes Park Training Institute!</td>
</tr>
<tr>
<td>8:15 AM</td>
<td>Mutual Aid for Park Districts (A, F, E) Jesse Felix, Phil Graf (Lake James Room)</td>
</tr>
<tr>
<td>8:45 AM</td>
<td>Restoring Wetland (A, E) Chuck Nelson (Lake James)</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>How to Handle Wild, Injured Animals (F, E) Jennifer Cunningham, Amelia Reuter (Lake James)</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Columbus Trails Survey (A) Ya-Ling Chen (Crooked Lake Room)</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>Gadgets (F) Jimmerson Room</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Climate Change Interpretation (E) Nona Capps (Snow Lake Room)</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Testifying in Court (A) Bruce Hronek (Lake James Room)</td>
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<tr>
<td>12:00 PM</td>
<td>Speed of Leader-Speed of Team (A) Scott Watson (Crooked Lake Room)</td>
</tr>
<tr>
<td>12:30 PM</td>
<td>Storm Water (E) Mike Donnellon, Brittany Bird (Lake James Room)</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Disability Awareness Training (A, E) Shyan Dawson (Snow Lake Room)</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Eco-Restoration (F, E) Doug Bauer, Jason Lewis (Crooked Lake Room)</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Hire Slow, Fire Fast (A) Erick Kleinert (Lake James)</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>It's Easy Being Green (E) Kristi Solberg (Snow Lake Room)</td>
</tr>
<tr>
<td>3:30 PM</td>
<td>Keeping Asian Carp From Establishing in the Great Lakes (A, E) John Goss (Lake James)</td>
</tr>
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<td>4:00 PM</td>
<td>School Visits and Parks (A) Mike Capps (Lake James Room)</td>
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<tr>
<td>4:30 PM</td>
<td>Advances in Mower Tech (F) Dan Gamble (Snow Lake Room)</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Ball Field Maintenance (F) Dan Otto, Todd King (Crooked Lake Room)</td>
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<td>5:30 PM</td>
<td>ADA Transition Planning (A, F) Patricia Klawitter (Lake James Room)</td>
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<tr>
<td>6:00 PM</td>
<td>6S Workshop (F) Joe Fausnaugh (Snow Lake Room)</td>
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<td>7:00 PM</td>
<td>Dinner Buffet in Lake James at 6:30 PM</td>
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<td>8:00 PM</td>
<td>Dinner Buffet in Lake James at 7:00 PM</td>
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<tr>
<td>9:00 PM</td>
<td>Invasive Pests (E) Philip Marshall (Crooked Lake Room)</td>
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<td>9:30 PM</td>
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The Eppley Institute is Indiana University’s unique outreach program for the park, recreation, and public land management professions and works to enhance the quality of natural, cultural, and recreational experiences for all people. With the resources of Indiana University, the Eppley Institute has access to experts and a technology support system that are difficult to duplicate.

The Eppley Institute provides expertise in several areas, including technical assistance and research, planning and design, and training and education for the National Park Service and other similar organizations around the world.

As a unit of the Department of Recreation, Park, and Tourism Studies, the Eppley Institute has a rich history and legacy in park and recreation management. Indiana University, one of the first park and recreation management degree granting universities in the nation, has been a leader in parks, recreation, and public lands education, research, and technical assistance since 1946.
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Shaping the Future
MONDAY FEBRUARY 25, 2013
Building Community in the Workplace
February 25, 2013
2:15 PM-5:00 PM
Lake James Room

- John P. Joyce, Associate Director (Park Forest Recreation & Parks Department)
- Barbara J. Moore, Chapter Director (Illinois Chapter of the National Coalition Building Institute)

This highly interactive workshop provides real-world context for the reasons people feel and act the way they do. This session will address a wide range of diversity issues: race, class, gender, religion, sexual orientation, physical ability, job type, and life circumstance. Presenters and participants will share stories and learn new ways to become effective allies to one another. Topics covered in this session can improve organizational harmony, effectiveness, and success.
Honoring Diversity
Building Community in the Workplace

A Program of

National Coalition
Building Institute
Illinois Chapter

Presented to

GREAT LAKES PARK TRAINING INSTITUTE

Monday, February 25, 2013
Introduction

Founded in 1984 by Cherie Brown, the National Coalition Building Institute (NCBI) is an international, non-profit leadership development organization that assists a broad range of organizations to create more inclusive environments. NCBI works with corporations, schools and universities, federal, state and local governments, community organizations, elected officials, union and trade associations, and many other groups of people. In 1999, the White House Task Force on Race recognized NCBI as one of the country's best practices in building relationships across group lines.

What makes the NCBI program different than traditional diversity programs is the theory that "people change more readily when they are lifted up and appreciated, not when they are made to feel guilty." (Brown and Mazza, 1997, Healing into Action). This program strives to create an atmosphere where everyone and every group is appreciated and where every idea is welcome.

Another NCBI theory is than we must feel proud about ourselves in order to be a strong ally to another. Reclaiming one's pride is an excellent way to become an ally and a leader in welcoming diversity. This too is different from the traditional diversity programs that focus on the doom and gloom that oppression and discrimination generate in the workplace.

The Welcoming Diversity workshop is an opportunity to recognize and honor our similarities and our differences. In order to foster fairness, increase participation at all levels and generate respect among one another, each of us must take on leadership and this begins by listening to each other.

We look forward to your participation!
NCBI Diversity Training Team

NCBI Consultants

Barbara J. Moore
Rob Gunther
John V. Moore
Theresa Tevsh
Workshop Objectives

The objectives of this workshop are for you to:

- Learn approaches for encouraging respect and team work
- Expand understanding and appreciation for diversity
- Identify misinformation and learn new information about other groups
- Discover strategies for reducing and eliminating prejudicial attitudes
Diversity

I believe that diversity is part of the natural order if things – as natural as the trillion shapes and shades of the flowers of spring of the leaves of autumn.

I believe that diversity brings new solutions to an ever-changing environment, and that sameness is not only uninteresting but limiting.

To deny diversity is to deny life – with all its richness and manifold opportunities. Thus, I affirm my citizenship in a world of diversity, and with the responsibility to:

Be tolerant. Live and let live. Understand that those who cause no harm should not be feared, ridiculed, or harmed – even if they are different.

Look for the best in others.

Be just in my dealings with poor and rich, week and strong, and whenever possible to defend the young, the old, the frail, the defenseless.

Be kind, remembering how fragile the human spirit is.

Live the examined life, subjecting my motives and actions to the scrutiny of mind and heart so to rise above prejudice and hatred. Care.
Principle: everyone has the capacity to lead the workplace in welcoming and valuing diversity

Where we work is also home in a way; and just as it takes individual leadership and responsibility to create and maintain a home that is welcoming, safe, and supportive, we must also strive to do so in the workplace.

This means we should have a say in how people are treated, how they are made to feel valued and appreciated, and how they are invited to make their contribution to the workplace. We must work to encourage our differences to be seen as assets, and take on the work of resolving the conflicts and misunderstandings that sometimes occur. We must develop the understanding that if we don’t lead in this effort, it may not get done!

Question for consideration:

- What steps will you take to lead in creating a welcoming place for diversity to flourish in your work place?
Principle: creating community in the workplace is about courageous and principled leadership.

What do courage and principle have to do with sustaining a workplace and a community open to all people? It has everything to do with it! When we stand up for each other, we stand up for what is right. And though this isn’t always easy, it is what is needed to create the kind of workplace and community where people can feel valued and wanted and encouraged to offer their best efforts!

Whenever we show the courage to take the lead in building community, we are always rewarded with relationships that make our life rich!

Question for consideration:

* List three things you will do to take a lead in building community:
Principle: welcoming and valuing diversity requires risk-taking and a willingness to make mistakes and clean them up.

We cannot expect to get to know each other and create bonds of mutual respect and understanding without making a few mistakes along the way. We can expect to mispronounce a name, forget a holiday, use an inappropriate term, or simply not have accurate information about a group, their culture, or their values. The key is how these mistakes are handled.

We need to develop the capacity to ask questions for clarity or more information, listen better, and take advantage of opportunities to learn more.

Question for consideration:
• What gets in my way of taking risks in an effort to reach out to other groups?
Principle:  **everyone** and every group **counts**

We need to value the contributions of every group and make a welcome place for them in our workplace. We need to figure out how to value the struggles of every group and how we can be helpful allies on their behalf. As we develop the capacity to stand with each other, we knit a workplace of trust that gives us support.

Whenever we make the error of not including a person or a group, we cut ourselves off from others and their ability to contribute to the organization.

The more we can recognize and acknowledge the unique specialness of our fellow workers, inquire about the things that they care about, and give welcoming attention to each other – the more this organization will become a place we will want to be in and contribute to.

**Question for consideration:**

- Which groups do I let in; which do I keep out?
exercise: ups and downs

How do we identify ourselves?
The Ups and Downs exercise gives us an opportunity to honor and appreciate the diversity that is in the room. We also get a chance to see which of our identities we feel the most proud of and which ones are more difficult to stand for.

What are the identities for which you stood?

Did we leave anybody out?
You probably noticed that the facilitator asked several times throughout Ups and Downs, "Did we leave anybody out?" This is to make sure that all individuals and groups are included. Every group counts.

If we are to have a positive, supportive and productive environment every group in this organization will need to know it counts.

What can you do in your job to make sure that individuals and members of different groups are included and not left out in the workplace?

ACKNOWLEDGEMENT

How did it feel to be applauded for who you are?
In the workshop throughout the day, participants are encouraged to welcome each other and to give respect and appreciation through good attention and applause.

How can we appreciate and applaud those who work around us?

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~10~
NCBI Principles

1. Guilt is the glue that holds prejudice in place.

2. Every issue counts.

3. To shift attitudes … hear stories.

4. Skill training leads to empowerment.

5. End leadership oppression.

6. Teams are necessary for institutional change.
Principle: confronting the misinformation we have learned about people from other groups moves us forward together

We are all born innocent. All that we know about other groups comes either from what we were told by others, what we heard or read from the media, or impressions that we formed from incomplete encounters with other groups. Much of the information we harbor on our records about other groups is in fact misinformation – an amalgam of prejudice, myth, and misconception.

Just as we were taught to misjudge others, we can teach ourselves and each other to confront the inner voices of prejudice and reach for honest, mutual understanding.

As we tackle the misinformation we have about each other, we hasten our arrival at the day when honest dialogue replaces recrimination and building community replaces fear and isolation.

Question for consideration:

• If you could throw away some of the misinformation on your records about other groups, what would it be?
exercise: first thoughts

Information on Stereotyping:

• To perceive someone is to behold them with our senses. As human beings, perception is natural for us.

• After perceiving someone, usually based on external and physical characteristics, we place them in a specifically-labeled mental file.

• Stereotyping is a shortcut version of perception.

• Stereotyping of objects is usually helpful.

• Stereotyping of people is usually not helpful.

• Once learned, a stereotype becomes an automatic response.
WHERE DO OUR STEREOTYPES COME FROM?

Family

Friends

Our Record

Of Misinformation

Community

Media

WE ARE BORN INNOCENT
A stereotype is extremely difficult to unlearn.

Using a three-step method we can begin to unlearn some of our stereotypes by:

1. Becoming aware of our mental records.
2. Re-examining our pre-conceived notions about people.
3. Seeking out additional information and experience

Freeing ourselves of stereotypes can be an exciting experience!
Principle: people who feel good about themselves do not mistreat others

Pride vs. Chauvinism
If we are serious in helping people to stop targeting other groups, we will first help them to heal the less than positive feelings they carry about themselves. Pride is different than chauvinism. Chauvinism says, "I'm better than you." But underneath, the person actually feels awful about herself. Real pride is welcoming: "I feel good about me, and I welcome you to feel just as good about you." It's hard to be an ally when you aren't feeling proud about yourself. Imagine a friend's house is on fire. You show up wanting to help but you claim, "I'm not usually very much good – I can't imagine I can do anything that would be helpful, but I'll try, even though I'm bound to fail." This is not the type of person we want around in a crisis, when quick, decisive action is required. When we feel bad about ourselves, our attention goes to our shortcomings. Consequently, we can't be the allies that others need. Guilt and shame do not create good allies. Reclaiming pride in the things we tend to feel ashamed about is one way to become an excellent ally and a leader in welcoming diversity.

SHARING OUR STRUGGLES WITH EACH OTHER:
When we learn the struggles and challenges of other groups, we can become better allies to them.

When others learn the struggles and challenges of our group, they can become better allies to us.
exercise: **caucus** groups

"What do we never want people to say, think, or do toward our group again?"
Getting in touch with our own experiences of discrimination helps us empathize with the pain and prejudice that others experience.

The caucus group that I joined was: ___________________________________

What I never want people to say, think, or do toward my group is:

What do we value about our group that we want others to know?

What can others do to be an ally to my group?

What I learned or what touched me the most about other caucus groups was:
People don't get along because they fear each other.

People fear each other because they don't know each other.

They don't know each other because they have not properly communicated with each other.

–Martin Luther King, Jr.
Risky Tree Business
February 25, 2013
2:15 PM-5:00 PM
Crooked Lake Room

- Lindsey Purcell, Urban Forestry Specialist (Purdue University)

Tree Risk Assessment is serious business, and the simple question of “is this tree safe?” is taken much too lightly. Trees provide significant benefits, but when they fail, they become liabilities. It is important to reduce your liability as a tree owner or manager by becoming familiar with risk assessment best management practices. This workshop is applicable to land owners, municipalities, park managers, and superintendents. The information presented will serve as a guide focused on public safety.

Session Handout

Tree Risk Management
Lindsey Purcell, Urban Forestry Specialist,
Purdue University Department of Forestry & Natural Resources

Trees provide many benefits for our homes, businesses and properties. If a tree is defective, however, it may become a hazard. It is important to understand that tree owners have a duty to inspect and maintain their trees. All property owners should take reasonable steps to protect themselves by involving a qualified consultant or certified arborist.

One of the more critical tasks of an arborist or urban tree manager is risk assessment of trees. It is the responsibility of a tree owner to maintain and manage this important green asset and protecting the safety of others is the highest priority. Tree Risk Assessment (TRA) is a relatively recent development and it is difficult to find much in the literature regarding the assessment protocol. Prior to the 80’s and even the early 90’s, little discussion exists on this practice; however, there have been recent developments with drastic improvements in procedure. Trees have not become more dangerous or a greater risk; the more likely causes of this heightened awareness is perhaps the “risk society” in which we live, increasing demands from insurance companies and increasing claims against local government.

The primary responsibilities of the arborist are to assess the potential for tree failure, advise owners of the consequences of failure and recommend the proper measures to prevent and abate failures. In assessing and managing trees it is important to create a balance between the inherent risk a tree poses and the benefits provided by the tree. Risk tree management begins with these basic steps:

Reduce tree liabilities: The property owner or manager has an obligation to periodically inspect trees for unsafe conditions. Since all trees have risk associated with them, regular inspection compels the owner or manager to evaluate the amount of risk they are willing to assume. Tree risk assessment is an important part of a program to determine if a tree is structurally sound or has the potential for failure. Inspections show that the tree owner is actively managing their trees and could reduce the owner’s liability if a failure occurs.
Inspect regularly: Trees should be assessed through inspections by a qualified arborist, preferably an International Society of Arboriculture Certified Arborist. Further inspections should be conducted after major weather events. At a minimum, trees should be inspected every five years or according to the owner’s risk tolerance.

Document and maintain records: Every inspection should be recorded and kept on file for future reference. These records are important for several reasons. Past evaluations can show how a tree has changed in its health and structure over the years. Also, written assessments are beneficial in liability claims and court cases. These written evaluations could minimize liability if a failure occurs and a claim is filed against the tree owner.

Develop a site polity and care plan: Every property manager should create and implement a policy for tree risk. This includes developing a standard of care, an inspection process and mitigation of property risk. Routine care and scheduled maintenance for all trees is essential.

Mitigate tree risk: Tree owners should make every effort to reduce risk with proper pruning and health care practices. Consider all options before deciding on removal. If possible, move or remove the “target” (see definition in “Tree Risk Assessment” section). Install structural support systems where feasible. Modify site conditions to improve the environment around the tree. Risk mitigation requires a process of logical options focusing on protecting the target and preserving the tree.

Schedule tree work: While evaluating trees for risk, the inspector should note any tree maintenance needs. The inspection can determine the timing and priority of work needed. The work should be prioritized first for safety and then for tree health. Consider potential risk, activities around the tree, level of acceptable risk and the needs of the client.

Create good tree planting strategies: Identify planting needs and locations that become available as trees are removed or destroyed. Improving the health and safety of the landscape requires an understanding of management principles, such as species selection and diversity. Also consider the impact of site infrastructure, including utilities, streets and sidewalks, and choose the right tree for the right place. Select trees known to thrive under local conditions and sustainable as long-term investments in the property.

Tree Risk Assessment
For a tree to be considered hazardous it must be defective either in some part or as a whole, with risk for failure and a target that is threatened. Trees are declared hazards if assessments have been completed and mitigation is required to prevent a failure from causing damage affecting the target. To understand the implications of this concept, tree owners need to know some common terms of tree risk management.

A target is people, property or activities that could be injured, damaged or disrupted by a tree failure. Tree owners must carefully assess the area around homes, playgrounds, sidewalks and parking areas. Is the target static, moveable or mobile? Consider whether people can be kept away or separated from the target area. Also, assess the target’s value and potential. Review the target zone, which is the area where the tree or a branch is likely to strike when it falls, to determine consequences of the tree’s failure. The target zone should include the areas inside a circle around the tree, which is at least as wide as the total tree height.

Risk is the combination of the likelihood of a tree failure event and the severity of the possible consequences of that event. Every tree has the potential to fail; however, only a small number of failures actually cause injury or damage. It is impossible to maintain trees free of risk. Some level of risk must be accepted by the owner.

Hazard is a likely source of harm and is identified as the tree part or parts which will affect the target zone. For example, an entire tree or a single branch could be determined as a hazard. Hazards are identified during tree assessments, and tree owners are required to take steps to minimize the risk of damage from failure.

Individual tree characteristics must be considered when conducting evaluations for defects and failure potential. Evaluations should take a systematic approach, assessing the potential for tree failure, understanding
the impact of such failures and outlining a plan of action to prevent and mitigate these failures. Tree owners should fully understand the site factors and characteristics of the tree species. There are several contingencies that influence tree failure potential and risk. These include soil type and saturation, wind exposure, pest damage, poor growing conditions and poor pruning practices such as topping.

Among the characteristics to consider when conducting tree risk evaluations are:

- Defects — severity and location. Decay, cankers, cracks and other positive indicators of weakness in the roots, stems and branches may need immediate attention if a target is present.
- Species characteristics. Some tree species possess weaker wood, a susceptibility to decay, poor growth habits and potential for pests. They could be more likely to fail after wounding because of poor ability to wall off internal decay or health issues.
- Canopy size, shape and weight distribution. This is especially true in situations where a tree is exposed to windy conditions, is leaning or has a poor stem-to-canopy ratio.
- Crown architecture. Poor branching and similar characteristics can create high-risk situations in strong winds and other weather conditions.
- Plant health and vigor. This determines how a tree can overcome wounding or pest infestations.
- The overall size of the defective part. A predetermined rating system, which outlines critical thresholds, should be considered and incorporated into the tree’s risk management plan.

### Tree Inspections

Assessments should include a thorough examination of each section of the tree. A systematic approach using standardized evaluation methods aids the process. Review the canopy (crown), branches and root zone to check for signs of failure. These include:

- Dead, diseased, dying or broken branches.
- Thinning or poor canopy health.
- An unstable branching pattern, overextended or weakly attached branches, or cracks in the stems.
- Cracks or decayed areas in the main trunk.
- Exposed or decayed roots, heaving of the soil, fungus growth or cracks in the soil around the root plate.

Recurrent inspections to determine tree health and condition are critical for successful risk management programs. Trees in active-use areas should be inspected annually for defects and conditions leading to failure. Inspections are necessary after storms to ensure excessive loads have not exceeded the strength of the tree and its parts. Also, be sure to note trees with a history of failures or those with problematic structure, for more frequent monitoring and inspection. A good database and archive of tree evaluations is a critical strategy in the overall risk management plan.

In response to increase concern with risk management, a great deal of research and development has been applied to the assessment process. Specifically, the release of the long awaited standards and best management practices for TRA. Recently, ANSI (Approved American National Standards) has released ANSI A300 Part 9, Tree Risk Assessment. The standards focus on the specific aspect of tree structure assessment. In addition, the International Society of Arboriculture (ISA) has released a companion publication, Tree Risk Assessment BMP’s as an aid in the interpretation of these professional standards and to help guide TRA process based on current science and technology.
This set of documents is intended to serve as a guide for tree managers and arborists with assessment consistently and accurately and to recommend the proper mitigation to achieve an acceptable level of risk. What the literature doesn’t do is provide specific tactics or measures for hazard conditions, but provides help in the decision-making process. Additionally, it is critical for the tree manager to consult a qualified arborist in the process.

The new ANSI standards on TRA and the best management practices provided by the ISA is a great step forward in formalization of this task. The information can help protect the tree owner and manager by providing consistency in the procedures that emphasizes the needs of the client. Now, the TRA process is finally moving closer to a standardized technique which will help the arborist evaluate risk and recommend the necessary action to reduce threats in the urban landscape. If risk assessment is part of the job description a visit the ISA website to purchase these two publications is highly recommended.
Timber Take-Down
February 25, 2013
2:15 PM-5:00 PM
Snow Lake Room

- Tim Glasper, Maintenance Foreman (Pokagon State Park)
- Gene Huss, Maintenance Repair (Pokagon State Park)

The Pokagon Crew is back this year with more tips for managing a park’s timber resources. This will be a hands-on session, as you will go into the park to try out tools used for timber removal, including a stump grinder! The session will also cover safety procedures that all employees should follow when handling equipment.

What we’ll cover today:

- Chainsaw Operation
- Stump Grinding

SAFETY – Our number one goal is to provide information that will make you as safe as possible when using a chainsaw!

Introducing PPEs – use ‘em!

- Chaps
- Hard Hat
- Eye Protection
- Hearing Protection
- Gloves
- Boots
- Long Sleeve Shirt
- Safety / First Aid Kits
- Communications

Why Develop a Saw Training Class?

Cowboy Type
- Easy on and off, cooler, convenient
- Be aware of the length (need to cover your lower legs fully and the top of your ankle)
- Recommend you buy wrap around style (covers calf area of the legs)
- Check tag for cleaning instructions. Oil/gas will break down the chaps quickly. Depending on type, clean with stiff brush or wash with detergent
Saw Pants

- Great for cold weather or all day sawing
- More comfortable than cowboy type
- Check tag for cleaning instructions

WARNING!

Anytime your chaps get torn or the saw gets into them…. it is time to get a new pair!!!!

Eye Protection

- Face Shield attached to Saw Helmet
- Goggles/Safety Glasses worn independently
- Good idea to have side-protection on glasses
- Be aware of wind direction and where the saw dust will fly

Hearing Protection

- Ear Muffs built onto Saw Helmet
- Foam Ear Plugs

Gloves

- Good fitting, not loose
- Leather preferred
- Mittens are good in the Winter

Vest

- Can be useful for storing:
  - First Aid Kit
  - Portable Radio
  - Small tools
**Boots**
- Steel toed boots recommended
- Kevlar Boots – expensive, but what is your foot worth???
- Need to come up over your ankle

**Long Sleeve Shirt**
- Not a requirement, but a good idea
- Protects from scrapes, abrasions and poison ivy
- Not as hot as you might think!

**First Aid**
- Have a First Aid Kit with you
  - Can be belt kit – don’t have to wear it all the time, but have it close, near your extra fuel and oil
  - Can be in vehicle if close by

**Communication**
- Have a Portable Radio and or Cell Phone
  - Can be in vehicle
  - Could be a hand held walkie-talkie
  - Do not have to carry it, but like the First Aid Kit, have it close, like with the fuel and oil cans
- If you can’t have a radio, get a horn or whistle to use in the event of an emergency (to attract attention)
- Let someone know where you are cutting

**Brain**
- Little-known PPE item
- Often overlooked
- Must have
- Use it to THINK!
  - Take frequent breaks, especially when it’s HOT
  - Drink plenty of fluids
  - Most accidents happen after Fatigue has set in
- Use break-time to sharpen that chain!

**Chainsaw Safety Features**
- Chain Brake
- Throttle Lock
- Chain Catch
- Hand Guard
- Spark Arrestor
Chain Brake
- Apply before attempting to start saw

Throttle Lock
- Prevents accidental throttle-up

Chain Catch
- Stops chain in the event the chain comes off

Hand Guard
- Protects hand from chain when chain comes off (Not if, WHEN)

Spark Arrestor
- Screen in the muffler
- Check weekly
- Clean if needed
- Saw will overheat if clogged
- Replace if damaged
- If you use the right fuel/oil mix and have the saw adjusted correctly, you won’t need to mess with it very often!

Daily Maintenance Check List
- Look over the saw for cracks, missing bolts, screws, starter cord, muffler
- Clean air filter (activate choke before taking filter off, this will prevent dirt from entering the carburetor)
- Bar inspection & maintenance
Chain Inspection

- Drag or raker acts as a depth gauge - determines thickness of chip/depth of cut
- Working corner/point - where the cut begins
- Side plate - cuts off the fiber
- Top plate - establishes width of saw kerf
- Chisel angle - allow chips to slide under the tooth

Daily Maintenance - continued

- Putting on the chain – don’t put it on backwards, use gloves, 1/8” of play
- Sprocket Care
- Idle & carburetor adjustment
  - If it’s running OK, don’t mess with it
  - Make certain the chain does not rotate at idle
  - Turn saw over while running, it shouldn’t stumble
- Fuel mixture
- Miscellaneous tools to perform maintenance

Starting the Saw

- Before starting – check safety features and look over the saw
- 2 methods of starting – NO DROP STARTING!!!!!!
  - Knee lock
  - On the ground starting

Operating the Saw

- Remember – work safely and comfortably
- Be Aware - Look up, Look Down, Look all Around
  - Overhead hazards
  - Other workers
  - Bystanders (campers, kids, etc.)

Reactive Forces

What happens when a chain running at 60 mph hits a stationary object…
Reactive Forces

**Push** – contact with the top of the bar – the saw is pushed back towards the operator

- To reduce the chance for push back when cutting with the upper side of the bar, make sure your stance is solid and you have the saw braced firmly.
- Anticipate the saw coming back toward you when cutting with the top side of the bar.

Reactive Forces

**Pull** – contact with the bottom of the bar – the saw is pulled away from the operator

- Beware of vines and small limbs

- Minimize pull by placing the dogs against whatever you are going to cut.

Reactive Forces

**Kickback** – contact with the upper half of the bar tip – the saw is pulled upwards

- Always know where the bar tip is
- Stand to the side of your cut.
Reactive Forces

- **Attack** – Contact with the lower half of the bar tip.
- Not so much a reactive force; more of a force we want to know how to use.
- Operator has more control – saw will only advance when we apply pressure.

---

Reactive Forces Summary

- **Push** – top of bar
- **Pull** – bottom of bar
- **Kickback** – upper half of bar tip
- **Attack** – lower half of bar tip

---

Reactive Forces

Understanding and being able to predict these forces is critical to a safe assignment.

---

Binds and Tensions

- Primarily two forces that are involved in binds and tensions:
  - **Tension**: a force that pulls or stretches
  - **Compression**: a force that squeezes or pushes

---

Binds and Tensions

- Where a log or tree is supported at both ends:
  - **Compression** on top.
  - **Tension** on bottom.

---

Top Bind

Cutting sequence to prevent pinching.

1. Make a shallow first cut on top, where the compression is greatest.

---

Would your saw get pinched if you cut into the top or into the bottom of this log?

This is called **TOP BIND**, where the saw will get pinched when you cut into any side of the log.
**Binds and Tensions**

**Top Bind**
Cutting sequence to prevent pinching.
1. Make a shallow first cut on top, where the compression is greatest.
2. Finish the cut by cutting up from the bottom, where the tension is greatest.

**Bottom Bind**
Cutting sequence to prevent pinching.
1. Make a shallow first cut on bottom, where the compression is greatest.
2. Finish the cut by cutting down from the top, where the tension is greatest.

**Standing tree**
Where a limb or tree has fallen against a standing tree:
- Tension on the side that’s against the standing tree.
- Compression on the side away from the standing tree.

This is called **SIDE BIND**.
Binds and Tensions

**Side Bind**

- Most dangerous of the binds.
- A slab can suddenly spring out, striking the saw operator while cutting.

**End Bind**

- If the tree is laying on an incline, the force of gravity will try to push the upper log down and into the lower log, thus pinching your bar and chain.

**Using wedges in bind situations**

When cutting through a tree or large limb, use a plastic wedge to keep the kerf from closing and pinching the bar.
Questions?

FACE CUT

- Look up – Look down – Look all around
- Evaluate
- Hazards – Limbs, Vines
- Leans forward or back, left or right, side to side, good or bad side when cutting
- Escape routes – 45 degree away from tree
- Chain Length: 80% of the diameter of the tree
- Hinge Thickness: All the way through to 10% of the diameter of the tree

Bore Cut Sequence

A. Use full throttle as you contact the tree with the attack quadrant of the bar tip.
   Advance the bar 3-4” into tree using the attack quadrant.

B. Rotate the saw so that it’s perpendicular to the tree.
   You will be using the kickback quadrant of the bar tip now so it’s critical to keep some forward pressure on the saw so that the tip doesn’t come out of the cut – which would result in kickback.

C. Advance the saw straight into tree, using full throttle.
   You will have to push some, since the “push” and “pull” forces will cancel each other.
**Bore Cut Sequence**

- Even though kickback can’t occur now since the bar tip is inside the tree, the reactive force will still cause the bar to want to cut upward. It’s especially important that you’re aware of this when setting your hinge width.

**Bore Cut**

- Direction of Fall
- Swing in on attack corner, run saw through tree.

---

**Holding Wood**

**Wedge Cut**

---

**Hinge Width**

---

**Questions ?**

---

**Spring Poles**

- We want to release the spring pole at its maximum point of tension slowly. In order to find the max. point of tension we can look at the diagram below:

At this point we have two options.
Option 1: Release the tension from the top side by standing at a 45 degree angle and slowly feeding the saw into the max tension point at wide open throttle (WOT) until the fibers begin to break by themselves. At this point stop and back away and let the pole release on its own.

Option 2: Release the pressure from the inside of the max tension point. Standing at a 90 degree angle we carefully shave the inside of the pole off until it starts to release on its own. Then we back up and let it do its work.

Bucking
Cutting fallen trees into smaller, more manageable lengths.
Prior to limbing, loggers should evaluate five potential hazards:
1. Overhead hazards
2. Spring poles
3. Butt movement forward (creates back pressure on limbs)
4. Butt twist (creates sideways pressure on limbs)
5. Butt off the ground (creates tension on the tree stem)

Back and sideways pressure on limbs can be handled using a limb lock.

A couple other points…
- Always carry a wedge with you…
- …and use it before your saw gets pinched.

Bucking

First access the various stresses. Take your time. Think. How would the log react if you were to just cut it in two?

Next, determine where the compression and tension are.

Plan the location and sequence of your cuts. Remember that you want to keep the tree from jumping when you cut it.

Make your first cut on the compression side of the log.

Make your second cut on the tension side of the log.

A typical scene after storm damage.

What’s going to happen if you make your cut where the arrow is?
The root wad will return to the ground while the stem stands erect. This will happen amazingly fast and with incredible force. So we need to be able to make this cut while minimizing our risk.

Where would you think the compression and tension forces are in this tree?

There will be some compression on the bottom, but a lot more tension on the top side, since the stump is trying to pull away as the root wad returns to the ground.

As you learned with the limb lock, you’ll make your first cut on the compression side and your second cut on the tension side.

Now we need to think about how we’ll place our cuts to prevent the stump and root wad from suddenly lurching.
From what we can see in the photo, the top portion of the tree is at least partially supported by the limbs, and will either not move after the first cut or jump up towards the stump. So we'll make our first cut, on the compression side – towards the top of the tree. Then we'll make our second cut, on the tension side – towards the stump.

This will effectively leave an overlap of wood on top that will ‘lock’ the stump from jumping up...thus the name “top lock”.

Leave a minimum of 3” between the cuts—more where there's danger of the two log sections separating.

Pulling one end of the log from the side will separate the wood fibers between the two cuts, allowing gravity and whatever tensions were present to extend their energy...

...while you are at a safe distance away.
**Bucking**

**TONGUE AND GROOVE**

- The tongue and groove is used when there is danger of the tree or a portion of the tree rolling on the cutter.
- Again, the first thing to do is assess the stresses and predict the movement of the tree so that you'll have an idea of how it will react as you cut it.
- Like the top lock, the tongue and groove cut will sever the fibers in the tree but still prevent the two pieces from moving.
- This allows the crew to attach a chain or rope and safely pull the two pieces apart without having someone in harm's way of the log or logs as they fall.

**Tongue and Groove**

The method for making a tongue and groove cut involves three cuts:

- The first cut bores through the center of the tree or stem.
- The second and third cuts are made three to four inches from the bore cut, one from the top and the other from the bottom.
- The second and third cuts need to be deep enough to bypass the bore cut, but the cuts must not meet.

Although the wood fibers are severed, the top lock keeps the upper section of the stem from jumping up.
As with the top lock, pulling one end of the log from the side will separate the wood fibers between the three cuts, allowing the two sections of the tree to break apart.

Once again you are at a safe distance away from the section of the tree that wants to roll.

Questions?

Thank You

- Be Safe
- Be Prepared
- You never know what is next........
Toboggan Run and Bonefire
February 25, 2013
7:00 PM
Park Property
TUESDAY, FEBRUARY 26, 2013
Mutual Aid for Park Districts
February 26, 2013
8:15 AM-9:30 AM
Lake James Room

- Jesse Felix, Superintendent of Parks (West Chicago Park District)
- Phil Graf, Owner and Certified Arborist (Graf Tree Care, Inc.)

On July 1, 2012, the West Chicago Park District experienced a natural disaster. A storm with 90+-mile-an-hour winds hit West Chicago with extreme force. One hundred and sixty-three trees fell or were damaged beyond saving. This session will explain how the West Chicago Park District approached the disaster.

DEALING WITH A NATURAL DISASTER IN YOUR PARKS

A recap of the devastating July 1st storm in West Chicago.
Jesse Felix, Superintendent of Parks
Phil Graf, Certified Arborist

WHAT HAPPENED?

In the matter of a few minutes, the park lost 163 trees, 81 of which were mature Oaks. Trees were uprooted, snapped in half, twisted, and damaged to the point that they were rendered unsalvageable.

Truly a natural disaster.

BEING PREPARED??

Should we really be prepared for a 100 year catastrophic storm?

BEING PREPARED??

Should we really be prepared for a 100 year catastrophic storm?

On Sunday July 1, 2012, a severe thunderstorm ripped into West Chicago. The north side of town sustained very serious tree damage. The epicenter of the storm was later identified as being Reed Keppler Park, one of the most prominent Oak Stands in DuPage County.
YES!
We came up with 8 things you can do to prepare for a Natural Disaster like ours...

BEING PREPARED!
How do we do it?
#1: Creating or subscribing to an early weather warning system

BEING PREPARED!
How are we doing it?
#2: Identifying response team members and defining their roles and responsibilities: The Crisis Management Plan.
#3: Training crews for disaster response
#4: Identifying cooperating agencies and private contractors: IPRA Natural Resource Section is currently planning an Emergency Response Request for Assistance.

BEING PREPARED!
How are we doing it?
#5: Identify Tree Hazards beforehand – periodic risk assessment evaluations. It is recommended that someone at your park district take a quarterly walk thru with an Arborist to assess hazards. Trees identified as hazards can be removed BEFORE a storm. Here are a few things you should be looking for...

BEING PREPARED!
#5: Identify Tree Hazards: DEAD TREES:

BEING PREPARED!
#5: Identify Tree Hazards: DEAD BRANCHES:
# BEING PREPARED!

## #5: Identify Tree Hazards: CRACK IN THE TRUNK?

No! These cracks...

## #5: Identify Tree Hazards: DECAY

Often times, trees with insect and disease issues are subject to being damaged in the storm.

## #6: Equipment and supplies

- backup generators
- caution tape
- safety cones
- PPE

***Chainsaws, wood chippers, and generators need to be in working order and properly maintained at all times!***

## #7: Securing funds for response and recovery

Great Lakes Park Training Institute
BEING PREPARED!

Why Should I Inventory?

- Anyone who manages anything needs to know the status and location of what they’re managing.
- EAB, and other pests like it, will take a worse toll on unprepared communities.
- Ease of planning for future building and activities.

BEING PREPARED!

What should my tree inventory include

- Common name of tree species in question.
- DBH measurement (Diameter at Breast Height, a standard forestry measure of diameter).
- Condition ranking, typically 1-5 (1 = excellent and 5 is dead or nearly so).
- Something to denote location, such as park name, tree number, address, etc.

BEING PREPARED!

Tree inventories – what are the options?

- Do Nothing and Wait for Disaster
- Paper Inventory
- Digital Spreadsheet Inventory
- GIS-based inventory

DO NOTHING AND WAIT FOR DISASTER

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BEING PREPARED!

What should my tree inventory include

- Maintenance recommendation, such as Hazard Prune, Cyclical Prune, Removal, etc.
- A specific identifier, such as a tag number.
- A mapping component, even if this is done on a paper map. Something visual.
- Basic comments or observed defects, such as insect damage, deadwood, overhead wires, etc. These comments should be standardized.

BEING PREPARED!

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CAN ANYONE NAME THIS TREE?

Ever seen One Before?

BEING PREPARED!
Tree Inventories – what are the options?

PAPER INVENTORY

BEING PREPARED!
Tree Inventories – what are the options?

DIGITAL SPREADSHEET INVENTORY

BEING PREPARED!
GIS Based Tree Inventory

- GIS = Geographic Information System
- Can use ESRI ArcView software or many other proprietary softwares.
- Relates all data to a point on a map.
- Can be used to create hard copy maps and data tables

BEING PREPARED!
GIS TREE INVENTORY

What is GIS?

- Geographic Information Systems are programs that use maps and data together as a powerful tool.
- Not GPS (Global Positioning System), which are the actual satellites and receivers.
- That thing on your dashboard is both a GPS and a basic GIS
BEING PREPARED!
GIS – CONFUSED!

DATA GATHERING: THE FUN PART

GIS IS A MAPMAKING TOOL

BEING PREPARED!
WHAT GIS CAN DO
GIS is a digital representation of the world (map) and the information associated with it. GIS can be asked questions (queried) about the information, or about the points or other geographic features. GPS tells a device where it is in relation to all of those points and all of that information on Earth.

DATA IS SYMBOLIZED IN GIS

KML FILES: GOOGLE EARTH

DATA IS SYMBOLIZED IN GIS

KML FILES: GOOGLE EARTH
**THE CRISIS MANAGEMENT PLAN**

- A chain of responsibility must be established for designating Spokesperson. Spokesperson will be responsible for making a phone call to the media on behalf of the Crisis Team. All listed Spokespersons should receive their duties and periodic trainings to help ensure their preparedness in the event of an unexpected crisis.

- The following is a list of responsibilities for the crisis management:
  - Executive Director
  - Superintendent of Parks
  - Superintendent of Recreation
  - Safety Coordinator: Mike Buenrostro

- The storm endured for 47 minutes.
  - The damage occurred in 24 minutes, from 12:05 to 12:29. Winds increased from 8 mph to 12-14 mph.
  - 12:05: 8.1 mph with 58.7 mph gusts
  - 12:10: 30.3 mph with 58.7 mph gusts
  - 12:15: 32.9 mph with 65.6 mph gusts
  - 12:21: 31.1 mph with 29.0 mph gusts
  - 12:23: 3.6 mph with 29.0 mph gusts
  - 0.18” of rain fell over the same time.

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Monday, July 2nd, the parks were inspected and a meeting with the Mayor, Police Chief, Fire Chief and Park District Director was held. The outcome was that I had to secure and clear the park so that the Rail Road Days Festival could be held in 10 days.

THE CRISIS MANAGEMENT PLAN

1. Secure the park
2. Get a contractor (s)
3. Call Phil
4. Make sure the guys have water and PPE.
5. Do we have enough chains?
6. Do we have enough chain saws?
7. Get the front end loader and make the park accessible.

PRINCIPLED LEADERSHIP

Steven Covey states that there are natural laws that follow the development of all successful human relationships. A person must be reliable, open and consistent in order to develop a reputation that over time leads to a development of trust.

Building relationships among Park District employees, your peers, contractors and other government agencies will help you in your hour of need.

In our case, we had six other Park Districts come to our assistance. Could we have had more?

PRINCIPLED LEADERSHIP

A Tale of 5 Contractors:

- One is our arborist.
- Two are resident contractors.
- One is a volunteer contractor.
- One is a contractor who worked for the district previously.

THE RECOVERY PLAN

Once the clean-up has been complete and facilities restored to the best of our ability, our next step was to document our plan to restore your parks — maybe even make them BETTER!
THE RECOVERY PLAN
Step one: BE POSITIVE!

BEING POSITIVE
Be this guy..... Not this guy....

BEING POSITIVE
Find ways to view your disaster as an opportunity to introduce new things to your parks and make much needed changes and improvements.

THE RECOVERY PLAN
"Inside every problem lies an opportunity"
Robert Kiyosaki
"I always tried to turn every disaster into an opportunity"
John D. Rockefeller
"I see a lot of opportunities here, God just culled the herd"
Jesse Felix

THE RECOVERY PLAN
#1 Created new flower beds adjacent to the 9/11 garden. Became the lead agency in the America in Bloom program.

RECOVERY PLAN
LOOK AT THE CULTURAL ARTS.
Freedom. The first sculpture brought in to Reed-Keppler Park in 2011.
RECOVERY PLAN

WELL, GRASS CAN GROW HERE NOW
BUT SO CAN FLOWERS.

Beds that were created in the open and now sunny areas.

RECOVERY PLAN

The Trinita
Sculptor: Lambert Lucietto
Our second piece of sculpture on loan.

RECOVERY PLAN

Wood Spirits
Carved by Bill Baker
A sustainability idea.

RECOVERY PLAN

Still a work in progress, the trail will lead to two garden beds with benches and rejoin the east-west trail.

RECOVERY PLAN

RE-INSTALLED AN ORIGINAL TRAIL INTO THE PARK.
Additional crushed red granite walking trails.

RECOVERY PLAN

CHILDREN AND NATURE
At the playground in Reed Keppler, beds are being developed for kids to interact with flowers and climb on the stones.
THE RECOVERY PLAN

We were able to plant new trees and increase our tree diversity. Both species and size diversity are now greatly improved.

DOUGHERTY'S HOMESTEAD

RECOVERY PLAN

DIVERSITY IN TREES
- State Street Maple
- Parkway Norway Maple
- Royal Red Maple
- Hackberry
- Greenfire Linden
- Pioneer Elm
- Vernal Witch Hazel
- Black Hills Spruce
- Bottle Brush Buckeye
- Vernal Fringe Tree
- Blu Oak
- American Filbert
- Turkish Filbert
- American Beech
- European Larch
- European Beech (Tri-Color/Weeping/Purple)

RECOVERY PLAN

Beds are being developed to have kids interact with nature. Climbing on the rocks and perennials that draw birds add to the idea of sustainability.

RECOVERY PLAN

Do you think we have enough mulch? Is this part of the sustainability plan? Yes, so is firewood but....

RECOVERY PLAN

Wood reclamation: Students from IIT are drawing plans for park benches to be reviewed by our Board of Commissioners.

RECOVERY PLAN

We were able to plant grass in areas that have never been able to have grass growing before. Being positive about something even this small can go a long way....
THE RECOVERY PLAN

Make sure you document your recovery plan so that you can refer back to it and measure your progress. Let it be viewable to the public.

CONCLUSION

Whatever you do, try not to panic. Disasters are times when we can reach out and help others, and bring people closer together.

CONCLUSION

There is no reason to lose friends or compromise relationships over a little natural disaster.

CONCLUSION

Honey badger does care.

CONCLUSION

Don’t panic – keep your cool...

NO REALLY, WE ARE DONE NOW.
THANK YOU
CONTACT INFO

Jesse Felix:
630/231-9474
jfelix@we-goparks.org

Phil Graf:
630/762-2400
phil@graftree-care.com
Testifying in Court (Being an Expert Witness)
February 26, 2013
10:00 AM-11:30 AM
Lake James Room

- Bruce Hronek, Professor Emeritus (Indiana University)

There is an 85% statistical chance that you will have to provide testimony because your agency was sued because of an injury, death, or property damage. For many professionals, this is a frightening situation. Using a PowerPoint presentation, the instructor will guide the participants through a mock trial and provide them with information as to what they can expect in a deposition and at a trial. This session will provide participants with tools to be successful in depositions and in a court of law.

THE EXPERT WITNESS

Bruce Hronek
Professor Emeritus
Department of Recreation and Park Administration
School of Public Health
Indiana University

THE TRUTH ABOUT EXPERT WITNESSES

Socrates asked the Delphic Oracle, “Who is the wisest man in the world?” The Oracle replied, “Socrates.” Rubbing his toe in the dust and looking abashedly downward Socrates said, “That can’t be true. There’s so much that I know I don’t know.” “Exactly,” answered the Oracle. From this Socrates extracted the lesson that he taught his students: “The man who does not know, and does not know that he does not know, is a fool.”

WISE EXPERTS

1. The expert should decide what information to use and what to ignore.
2. Keep written information to a minimum between the attorney and his/her expert witness.
3. The attorney must assume whatever he/she says about the case to the expert is discoverable.
4. Case facts should not be hid from the expert.
5. Keep the non-testifying expert away from the testifying expert. Their discussions on facts may bias the case. Some evidentiary information should be used only in a secure environment.

FINDING AN EXPERT

Can experts be from anywhere? Should experts be from inside organization? Should experts be from the outside? Local verses distance experts (jury must connect) Should have knowledge of local standards of care Should be personable (jury likes nice people) Should have hands-on experience in field of expertise Determine if they are a Scientific or a Technical Expert (or both)

EXPERT REPORTS

1. The entire report must be the work of the expert.
2. Parties can stipulate that expert reports are not needed.
3. Expert reports are considered hearsay evidence.
4. Expert reports are due 90 days before trial.
5. Expert reports can be challenged in depositions.
6. An expert report shall contain a complete list of opinions, bases, information considered, and exhibits that can be used in the trial.
CHECKING OUT THE EXPERT

1. Expert’s history of honesty.
2. Expert’s prior opinions in their books, technical papers, and prior testimony.
3. Check to see if expert advertises his/her expertise.
4. Ask people who have used the expert about their trial skills and dependability of the expert.
5. Check for seminars, speeches, or panels where the expert was a participant.
6. Check Internet for hits on the expert’s name.

PREPARING THE EXPERT FOR A DEPOSITION

1. The deposition can only be required after the expert’s report is filed.
2. An expert may use notes during the deposition.
3. Reduce the experts anxieties before the deposition.
4. The five basic answers in depositions that work well:
   a. Answer the question - short answers are best, such as “yes”, “no”, “green”. Don’t elaborate;
   b. “I don’t know”, when you don’t know;
   c. “I don’t remember”, when you don’t remember;
   d. “I don’t understand the question” when you don’t;
   e. “I would like to take a break”, when you need to take a break or talk to your counsel;

YOU WILL BE ASKED AT THE DEPOSITION

1. What opinions have you formed?
2. What did you do to reach those opinions?
3. Why and how did you do the studies?
4. What were the results of your study?
5. How did the results effect your opinion?
6. Are there reliable authorities in this field?
7. What assumptions did you make?
8. Is this your current resume?

ADMISSIBILITY OF EXPERT TESTIMONY

1. The court ultimately determines the admissibility of expert witness testimony.
2. Testimony should be based on expert knowledge based on scientific, technical, or specialized information.
3. If the expert’s background limits his/her technical ability the testimony may be limited or excluded by the court.
4. Changes in opinions between the expert’s report, deposition, and the trial testimony may result in impeachment and cause the court to reject all the testimony.

IN COURT YOUR ATTORNEY WILL

1. Introduce you to the jury and court by asking you some questions about your expertise.
2. With the help of your attorney, let the jury know why you are there and why they should listen to your testimony.
3. Explain to the court why you are qualified to give an opinion.
4. Your attorney will ask you for your major opinion(s) related to the case.
5. Your attorney should anticipate and defuse cross examination by asking about assumptions you have had to make.
6. On re-direct your attorney will ask you to restate your main opinions.

CROSS EXAMINATION

Cross examination is like pig wrestling, both the attorney and the witness will get dirty, but only one will like it.

1. The opposing attorney will start their questions with “As an expert in this area you would agree that…”
2. The opposing attorney will ask you to agree to a statement that narrows the disagreement between your opinion and the opinion of the opposition’s expert.
3. The opposing attorney will establish where the opposing experts agree…then after establishing their objectivity, will attack the expert with the areas of disagreement.
DESTRUCTION OF THE EXPERT WITNESS

1. Won’t let him/her leave the stand to show graphics or anything that illustrates their statements.
2. Keep all questions tightly closed and short. Will not allow witness to ask “May I explain.”
3. Begin questions on an unexpected subject such as items found in the witnesses deposition or report.
4. Save the most interesting and controlled subject as the final question.
5. Emphasize facts that the expert has failed to use that is detrimental to their case.

FEDERAL RULES OF EVIDENCE

Rule 602 A witness may not testify unless they have shown significant personal knowledge of the subject area.
Rule 701 Lay witnesses must show a significant experience in the area of their testimony
Rule 702 Expert witnesses must apply scientific evidence and methods reliably to the facts of the case.
Rule 705 Expert witnesses must disclose facts or data that let to their opinion.
Rule 706 When needed, the court may appoint their own expert witness. Court appointed witnesses can be cross examined by counsel.

THERE IS A STRONG CHANCE YOU WILL BE INVOLVED IN A COURT ACTION

With your education and experience, you will have a good chance to be asked to be an expert witness or a material witness.
You will either be asked to participate voluntarily or you will be ordered into court with a subpoena.
The Columbus People Trails User Survey will be the first stage of a multiphase study to investigate holistically how a trail affects a community. This user survey will primarily be an exploratory study seeking descriptive information regarding user behavior; benefits and constraints to trail use; spending patterns for trail-related merchandise; the trails’ potential as part of the transportation system; desired trail amenities; safety and maintenance concerns; the trails’ role in physical fitness and quality of life; how far users are willing to travel to the trail; and perception of the trails’ importance to the community. The results of this preliminary study could provide valuable data and examples for managing trails and understanding trail users in the community.

**Communities**

- Community usually refers to a social unit that shares common values
- Essential elements of a community: social interaction, geographic area, and common ties

**Healthy Community**

- Communities should use biking and walking trails to connect residents
- Communities’ built environment: parks and recreation areas should play key roles
- Communities should partner with trail and greenway managers

**Healthy Community**

- Community refers to a social unit that shares common values
- Essential elements of a community: social interaction, geographic area, and common ties

**Healthy community**

- National Health Statistics
  - 7 out of 10 deaths among American adults result from chronic disease
  - Nearly half of American adults: at least 1 chronic illness
  - 1 in 3 American adults is obese
  - Diabetes prevalence

**Park and Public Health**

- **5 Keys trends**
  - Trend #1: Parks are good medicine
  - Trend #2: Tobacco-Free Parks set a new norm
  - Trend #3: Community walking programs gain speed
  - Trend #4: Weighting the pros and cons: health impact assessments
  - Trend #5: Turning recreation deserts into community oases

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**Outline**

- Healthy Communities
- The Importance of Parks and Trails
- Trail Benefits
- The Columbus People Trail Study
- Research Plan
- Questionnaire
- SOPARC

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**The People Trail User Study**

Great Lakes Park Training Institute Presentation, February 26, 2013

Charles Chancellor Ph.D
William Ramos Ph.D
Ya-Ling Chen M.S

Department of Recreation, Parks and Tourism Studies
School of Public Health
Indiana University
Connection between Parks & Recreation and Public Health

- Partnership between National Recreation and Park Association (NRPA) and Centers for Disease Control (CDC): Healthy People 2000
- NRPA & National Heart, Lung, and Blood Institute: Heart ‘N’ Parks program

Parks and active living

- Active living: walking or bicycling to work, school or to go shopping. It also means exercising or playing in the park, using recreation facilities, or simply choosing stairs over elevators.
- Parks with paved trails are 26 times more likely to be used for physical activities than those without

Adults living within a half mile of a park visit parks and exercise more often

- For every additional park located within a half-mile of their home:
  - Girls were twice as likely to walk to school
  - Boys were 60% more likely to walk in leisure time

Children ages 8-10 who live near parks are more likely to walk to school or for leisure

- Girls were twice as likely to walk to school
- Boys were 60% more likely to walk in leisure time

Trail benefits

Contribution to Physical Activity

- Min-Shan Park and Waidangong
  - http://www.youtube.com/watch?v=5PMFonjJ1LQ&feature=related
- Line dance
  - http://www.youtube.com/watch?v=wGzDyFcSbgE&feature=related
Indiana Trails

- Nationally 1,683 trails - 19,872 miles
- Indiana 43 trails - 202 miles
- Indiana’s former Governor Daniels approved the purchase of 150 unused railways and state funding of $20M.
  - Goal: Hoosier living within 15 minutes (7.5 miles) of a trail by 2016
  - Longest trail in Indy: Monon Trail
  - Eagle Creek Trail will be longest (22.4 miles planned)

Factors which may influence trail use

- Safety
- Design
- Management
- Aesthetics
- Others

Trail benefits

Environmental Psychology

Place attachment & Place identity
- Predictor variables on annual visit, place dependence, and place identity

Contact with Nature

- The benefits of contact with nature
- The human-nature relationship:
  - Biophilia Hypothesis
  - Attention Restoration Theory
Trail benefits

Contribution to Physical Activity

- Parks and recreational facilities have the potential to promote childhood physical activity and reduce childhood obesity
- Trails as interventions promoting physical activity in communities

Trail benefits

Health

- Reduce medical costs
  - Every $1 investment in trails for physical activity led to $2.94 in direct medical benefit.
  - Construction and maintenance costs per use are relatively low. (Wang et al., 2005)
- Increase quality of life
- Promote physical activity
- Lower obesity rates

Trail benefits

Economic Activity

- Lower health care costs
- Increase access to businesses along trail
- Increase sales of trail specific goods
- Increase the tourism of the city
- Enhances community
  - Attract businesses and employees
  - Increase and support the commuter population
  - Attract new residents

Trail benefits

Increased Quality of Life

- **Objective QOL**
  - can be relatively easily defined, quantified, and measure.
  - ex: GDP, square feet of housing space, toilets, telephone, automobiles and TV sets, etc
- **Subjective QOL**
  - concerned with an individual’s “experience of life”
  - ex: level of satisfaction, level of happiness, sense of well-being, etc

(Lloyd & Little, 2005)

Trail benefits

Increased Quality of Life-WHO

Physical

Environmental

Psychological

Social
Trail benefits
Increased Quality of Life

- Provides a safer, environmental friendly, sustainable transportation option
- Increases recreation opportunities and provides pleasant area to walk
- Provides recreation space for most all ages
- Distinguish the city as an active community with high quality lifestyle amenities

The People Trail

- Type of Trail: Urban
- Total Length: 19.0
- Surface: Asphalt

Existing People Trail

History of the People Trail

- 1985 Based on community response, City Council approved $50,000.00 to build 8 miles.
- 1986 Mill Race – Noblitt Trail (1.5 miles)
- 2001 remainder of State Road 46 Trail (2.5 miles)
- 2011 Owens Bend Trail completed (1.3 miles)
Research project purpose

- User behavior
- Benefits and constraints to trail use
- Transportation system
- Desired trail amenities
- Safety and maintenance concerns
- The trails’ role in physical fitness and quality of life
- Distance willing to travel to the trail
- Perception of the trails’ importance to the community

Research Method

- Questionnaire: User Survey
- Mobile interviewers
- Trail users
- iPad and iSurvey

Instrument I: user survey

- Present use
- Trail satisfaction
- Approximate spending for trail use
- Community quality of life
- Demographic information

Instrument I: user survey

- **Present use**-
  - Duration
  - Frequencies
  - Purpose
  - Motivation
  - Constraints

Instrument I: user survey

- **Trail satisfaction**-
  - Trail attributes, and issues

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neutral</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trail length</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trail width</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation facilities along the trail (e.g. playground, picnic area)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Instrument I: user survey

- **Approximate spending**-
  - Apparel
  - Shoes
  - Equipment
  - Food
Instrument I: user survey

- Community Quality of Life-
  Please rate the following trail characteristics for the contribution of the trail towards quality of life of your community in the City of Columbus. (1 being strongly disagree and 5 being strongly agree)

<table>
<thead>
<tr>
<th>Trail characteristic</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither disagree nor agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think the People trail contributes to the amount of open space?</td>
<td></td>
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</tr>
<tr>
<td>Do you think the People trail contribute to the access to public transportation?</td>
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</tr>
<tr>
<td>Do you think the People trail contribute to the decrease the amount of the pollution?</td>
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</tbody>
</table>

Research Method

- Observation: System for Observing Play and Recreation in Community (SOPARC)
- Trained data collectors will code the physical activity level through observation

Instrument II: SOPARC

The System for Observing Play and Recreation in Communities (SOPARC) (McKenzie et al., 2006)

- Basis for the instrument (MTS)
- Systematic observation
- PA posture coding
- Reliability/validity

Instrument II: SOPARC

SOPARC Training (primary & reliability observers)

- Phase #1 - Protocol Video Review and Practice -3 hours
- Phase #2 - Study site practice orientation/practice -6 hours
- Goal: Achieve Reliability at > 80%

Instrument II: SOPARC

SOPARC - Data Collection Procedures:

- Scans:
  - Age Category (Gender, and Physical Activity Posture
  - Youth
  - Teenager
  - Adult
  - Senior
- The primary researcher initiates when to begin and end each scan
- Data is recorded using digital counters, and transferred recording sheets after each scan for each target/sub target area

- Postures Coded as:
  - Sedentary
  - Walking
  - Vigorous

Table 1 - Trail Posture Coding
Project timeline

- Scholarly publication and presentation opportunities July 2013-2016.

Future research

Data from the user survey will inform future trail projects which include:

- 1) user survey in summer months covering the same topics as the Spring 2013 Survey when there are more visitors to the area, and more overall intercepts will be sought
- 2) an assessment of the trails’ role in regional health related agencies

Future research

- 3) a county wide postal mail based resident survey
- 4) a survey of individuals who own land adjacent to the trail
- 5) a more holistic assessment of the trails’ economic impact to Bartholomew County which includes change in land prices due to the trails, interviews with businesses along the trails and businesses who sale items for use on the trails, and costs for trail development and management

Thank you!

- Question? Comments? Thoughts?

Ya-Ling Chen M.S
chen72@indiana.edu
How to Incorporate Climate Change Science into Your Programs
February 26, 2013
10:00 AM-11:30 AM
Snow Lake Room

• Nona Capps, Research Associate (Eppley Institute for Parks and Public Lands at Indiana University)

This session discusses the climate science issues of carbon sequestration, phenology, and sea-level rise. Using examples from three national parks (Everglades National Park, Great Smoky Mountain National Park, and Sequoia and Kings Canyon National Park), you will learn how to incorporate climate science issues into your own programs.
Attendees presented gadgets that they use during the course of their duties that revolutionized their park’s operations. This show and tell style event has been a part of GLPTI since its earliest years!
Invasive Pests, Insects, and Aquatic Plants in Great Lakes Parks
February 26, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Crooked Lake Room

• Philip Marshall, State Entomologist (Indiana Department of Natural Resources)

This session examines invasive insects, diseases, and aquatic plants impacting and threatening the forests and water resources of the Great Lakes, from the emerald ash borer and sudden oak death to Hydrilla and parrot feather. The distribution and management information for each pest will be presented. This session will provide participants with information that can be used to train others to recognize and report any occurrence of these pests, which will make management easier.
INVASIVE PESTS, INSECTS, AND AQUATIC PLANTS IN GREAT LAKES PARKS

PHILIP MARSHALL, STATE ENTOMOLOGIST
ERIC FISCHER, AQUATIC INVASIVE SPECIES COORDINATOR
INDIANA DEPT. OF NATURAL RESOURCES

AQUATIC INVASIVE PLANTS THREATENING GREAT LAKES PARKS

ERIC FISCHER, AQUATIC INVASIVE SPECIES COORDINATOR
INDIANA DEPT. OF NATURAL RESOURCES

PROHIBITED INVASIVE AQUATIC PLANT RULE

- RULE TOOK EFFECT AUGUST 31, 2012
- REQUIRING IMMEDIATE ELIMINATION OF NURSERY INVENTORY
- MUST NOT SELL, GIFT, BARTER, EXCHANGE, OR DISTRIBUTE A SPECIES ON THE LIST
- 28 SPECIES - 17 OF WHICH ARE FEDERAL NOXIOUS AQUATIC PLANTS
- WHY? >$1,000,000 annual DNR & Lake Assoc. costs

AQUATIC FEDERAL NOXIOUS WEEDS

Mosquito fern (Azolla pinnata)
Killer algae (Caulerpa taxifolia)
Anchored waterhyacinth (Eichhornia azurea)
Hydrilla (Hydrilla verticillata)
Organisms potentially in trade

Organisms potentially in trade
Currently invading Indiana or high priority species of concern.
Not listed as Federal Noxious Weeds

Newly Prohibited Invasive Aquatic plants
Yellow flag iris
(Iris pseudacorus)

Each flower resembles a common garden iris leaves are mostly basal and are folded and clasp the stem at the base in a fan-like fashion.

Yellow flag iris
(Iris pseudacorus)

FLOWERING RUSH
(Butomus umbellatus)

FLOWERS GROW IN “UMBRELLA SHAPED” CLUSTERS
EACH FLOWER HAS THREE PINK TO WHITE PETALS THAT ARE APPROXIMATELY ONE INCH ACROSS.
FLOWERING RUSH HAS GREEN STEMS THAT ARE TRIANGULAR IN CROSS SECTION.
ERECT LEAVES THAT MAY HAVE SPIRALLY TWISTED TIPS.

FLOWERING RUSH
(Butomus umbellatus)

FLOWERING RUSH
(Butomus umbellatus)

COMMON CATTAIL
(TYPHA LATIFOLIA)

NARROWLEAF CATTAIL
(TYPHA AUGUSTIFOLIA)

NARROWLEAF CATTAIL
(TYPHA AUGUSTIFOLIA)

PROHIBITED
**Yellow Floating Heart**
(Nymphoides peltata)
- Bottom-rooted perennial with long branched stolons
- Heart shaped or nearly circular leaves are 3-10 cm long on long stalks
- Bright yellow flowers with five petals

**European Frogbit**
(Hydrocharis morsus-ranae)
- Free-floating plant
- 1-2 inch wide heart shape leaves
- Upper side of leaf is green
- Underside dark purplish-red
- Whorls of 4-6 leaves around stem
- Produces a single three petal white flower that is 1.5 cm wide

**PROHIBITED**

*White Water Lily 6-12in diameter*

*European Frogbit 1-2in diameter*
Water chestnut
*(Trapa natans)*

Parrot feather
*(Myriophyllum aquaticum)*

**PARROT FEATHER ID**
*(Myriophyllum aquaticum)*
- Submerged leaves
  - up to 2”
  - 20-30 divisions/leaf
  - Whorls of 4-6 leaves around stem
  - Sometimes emerges up to 12”
  - 6-18 divisions/leaf
  - “Small fir trees”
- Plant trade

**MESERVE LAKE**
- Parrot Feather Eradication
- 3 years and >$50,000
- 18 acre lake in Steuben County
- $2,800/acre
- Ending 2012

**Eurasian watermilfoil**
*(Myriophyllum spicatum)*
**EURASIAN WATERMILFOIL**  
(Myriophyllum spicatum)

- Count the pairs of leaflets. Eurasian watermilfoil usually has 12 or more pairs on each leaf
- Leaves are typically arranged in whorls of four around the stem
- ~$800,000/year in IN

**Brittle Naiad**  
(Najas minor)

**BRITTLE NAIAD**  
(Najas minor)

- Leaves are opposite, strap-shaped, 1 in in length, having prominent marginal teeth 7-15
- Stems fragment easily
- Leaves of unbranched
- Appearance of leafy rosettes at tip of stem

**Curlyleaf pondweed**  
(Potamogeton crispus)

**Curlyleaf pondweed**  
(Potamogeton crispus)

- Has small teeth along the leaf edges
- Leaves have distinct wavy edges
- Leaves arranged alternately around stem
- Sprouts out turions

**Widespread**
**BRAZILIAN ELODEA**

- **NATIVE** – Good alternative
  - American elodea (Elodea canadensis)
- **INVASIVE** – Prohibited
  - Brazilian elodea (Egeria densa)

**GRIFFY LAKE**

- Brazilian elodea Eradication
- 2 years of treatment and $130,000
- 109 acre lake in Monroe County
- $1,400/acre
- Ended 2009

**LAKE MANITOU**

- Hydrilla verticillata Eradication
- 6 years of treatment and <$1,600,000
- 735 acre lake in Fulton County
- $2,700/acre+
- Still going
Call 1-866 NO EXOTIC (1-866-663-9684).

ONLINE REPORTING
www.invasivespecies.in.gov

ANY QUESTIONS?
E-mail efischer@dnr.in.gov

STOP AQUATIC HITCHHIKERS™
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When you leave a body of water:
• Remove any visible mud, plants, fish or animals before transporting equipment.
• Eliminate water from equipment before transporting.
• Clean and dry anything that comes into contact with water (boots, trailers, equipment, clothing, dogs, etc.).
• Never release plants, fish or animals into a body of water unless they came out of that body of water.
Advances in Mower Technology
February 26, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Snow Lake Room

- Dan Gamble, Vice President of Commercial Sales (Kenney Machinery Corporation)

This session will describe the past, present, and future of lawn mowing equipment. Advances in Turfgrass Mowing Equipment will be used to track the advancement of mowing equipment over time. Additionally, the session will detail new government fuel emission regulations and explain what impact they may have on mowing.

- Recognize different types of mowers
- Describe the present status of mower technology
- Summarize the direction mower technology is heading
- Explain what Tier 4 government emission requirements are and how they affect mowers
THANK YOU!

Questions: dan.gamble@kmcturf.com
School Visits and Parks
February 26, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Lake James Room

- Mike Capps, Chief of Interpretation & Resource Management at Lincoln Boyhood National Monument (National Park Service)

School buses are in the parking lot, and the kids are excited about their field trip to your site. Your staff is prepared and ready, and the day is full of promise. But did all of this just happen? Not quite. A lot of planning goes into getting ready for those buses and kids to show up. Join us as we discuss how this is done at Lincoln Boyhood National Memorial, where we serve between 5,000 and 6,000 school kids every spring.
Traveling Trunk

Teachers’ Packet

Teaching with Historic Places Lesson Plan

Junior Ranger Program
Keeping Asian Carp from Establishing in the Great Lakes
February 26, 2013
3:30 PM-5:00 PM
Lake James Room

Applicable Education Track(s): Administrative, Environmental

• John Goss, Asian Carp Director (White House Council on Environmental Quality)

The migration of Asian carp toward Lake Michigan is one of the most serious invasive species threats facing the Great Lakes today. Asian carp are voracious eaters and heavy breeders. Some varieties can grow to more than 100 pounds and are capable of eating 20 percent of their body weight in a day, stripping the food web of key food sources for native species.

This talk will provide an update on the Asian Carp Control Strategy Framework, which outlines the priority actions planned and underway to address the threat of Asian carp invading the Great Lakes, including both management actions to prevent Asian carp introduction and establishment, and research to develop permanent controls on Asian carp populations.
Asian Carp Regional Coordinating Committee

The ACRCC, with support from Federal, state, and local agencies, and private stakeholders and citizens, are creating a sustainable Asian carp control program to prevent the establishment of an Asian carp population in the Great Lakes.

Impacts in Ohio River Basin
Guide - Darrell Van Vactor

- Historically, vibrant striped bass and sauger/walleye fisheries in Tennessee, Cumberland, and Ohio rivers
- Tailwater sport fisheries have been decimated
  - No striped bass or sauger/walleye were caught below Kentucky Dam over a 3 month period during 2011
- Increased numbers of Asian carp in Kentucky and Barkley lakes are a safety problem for boaters
- Dramatic local impacts, both from an economic and recreational perspective

Habitat Match Level

Silver Carp (H. moltrix)  Bighead Carp (H. nobilis)

National Distribution

Silver Carp (H. moltrix)  Bighead Carp (H. nobilis)

Response to the Threat

An effective electric barrier system
Extensive monitoring and response
Development of new control technologies
Asian Carp Control Strategy Framework
Development of long term solution (GLMRIS)

Asian Carp Regional Coordinating Committee

Federal Executive Committee
U.S. DEQ, Gena Co-Chair
U.S. EPA, Tillman Co-Chair
U.S. DOD, Michael Kiesler
U.S. FWS, Joe Sizemore
U.S. FWS, John Gannon
U.S. DOI, James Cooper
U.S. FWS, Robert C. Tannahill

Regional Coordinating Committee
U.S. DEQ, Erin Co-Chair
U.S. EPA, Michael Co-Chair
U.S. FWS, Dan Co-Chair
U.S. FWS, Mark Co-Chair
U.S. FWS, John Co-Chair
U.S. FWS, James Co-Chair
U.S. FWS, Robert Co-Chair

Monitoring and Rapid Response Workgroup

Communication and Outreach Workgroup
ACRCC Control Actions

Accomplishments
• Asian carp not established in Chicago or the Great Lakes
• All Great Lakes States, Ontario and Canada as partners
• Only CAWS a high risk pathway for Asian carp
• Redundant and effective electric barriers
• New nets, gear and sampling techniques for Asian carp

Ongoing Actions
• Best GLMRIS control options identified in 2013
• eDNA and fish sampling Great Lakes basin wide
• Testing new technologies like water guns and toxicants
• Harvest Asian carp below the electric barrier
• Refining eDNA technology and identifying vectors

Asian Carp Risk and ACRCC Monitoring within Illinois

- Asian carp have not advanced since 2007
- CAWS & Upper Des Plaines
  - Barriers
  - Monitoring
  - Response
- Upper Illinois & Lower Des Plaines
  - Front Monitoring
  - Barrier Defense
- Illinois River
  - Commercial Harvest

Chicago Area Water System (CAWS)

14 CAWS Responses Since 2009

No Asian Carp Found since 2010

- Rotenone
  - December 2009
  - May 2010
  - May 2010
  - June 2010
  - June/July 2010
  - August 2011
  - October 2011
  - May 2012
  - 3x June 2012
  - July 2012
  - 3x October 2012
  - November 2012

Traditional Gear/Novel

Introduction Pathways

Retail Live Bait Surveys

Bait Shops in Northeast Illinois

U.S. Fish and Wildlife Service
Chicagoland Urban Fishing Ponds

21 ponds identified; 14 to be sampled in 2012

- Four ponds sampled in late summer/fall 2011; 20 large bighead carp removed
- Two ponds no longer a threat due to rehab or severe winterkill
- Garfield Park Lagoon sampled in 2012; 2 large bigheads removed
- Sampling over past month has removed several other large bighead carp in isolated ponds, reducing chances for human mediated movement

- Storm sewers, fisheries sampling gear, fish-eating birds, dead fish carcasses, barges, and sediments may contribute to a positive eDNA detection without a live fish being present
- DNA can stay on these sources for a number of days
- Tagged-bird studies show large variations in bird movement and consumption of Asian carp in the wild, which may lead to positive detection of Asian carp eDNA in bird feces
- Shedding rates of DNA from Asian carp were not affected by different temperatures or flow rates of water
- DNA from Asian carp sperm can be detected for over two weeks after release from an Asian carp

USGS Asian Carp Science

Exclusion-Detection-Attraction-Removal

- Developing new tools and methodologies
- Working to transfer these tools to managers
- Approach can be applied to other invasives

Current and Future Research

- Examining food availability in the Great Lakes
- Using pheromones to attract then capture Asian carp
- Developing toxic microparticles to control Asian carp, minimizing effects on non-target species

Great Lakes Monitoring Efforts

- Evaluating use of waterguns (sound energy waves) to deter and repel Asian carp
- Identifying potential river spawning locations

Tributary Risk Assessment

- Assess GL tributary suitability for Asian carp spawning and egg transport
- Developing a Tributary Assessment Tool
  - Prototype developed last summer
  - Water quality and flow data from Maumee, St. Joseph and Milwaukee Rivers
  - Decision-making Tool for managers
- Developmental study finding: Vertical swimming by larval fish upon hatching
  - Implications for length stream carp for successful spawning

Toxic Microparticles

- Bioactive released in intestine
- Bioactive passes through stomach unaltered

USGS Asian Carp Science

Partner-Driven Science Strategy

- Developing new tools and methodologies
- Working to transfer these tools to managers
- Approach can be applied to other invasives

- Examining food availability in the Great Lakes
- Using pheromones to attract then capture Asian carp
- Developing toxic microparticles to control Asian carp, minimizing effects on non-target species
Seismic Technology/Watergun

- Use of seismic technology to divert invasive Asian carp
- Progress: Data analyses on trout, pike and carp studies have been completed
- Next Steps: Conducting structural effects study in CAWS (USACE collaboration)
- Test different size guns
- Observe fish behavior i.e. Will it keep fish away? How many guns needed?

Bluegreen Algae

- Alternate foods/bluegreen algae
  - Report on bioenergetics model findings in review
  - Report on how the model has been improved in review
  - Assess whether there is enough food for Asian carp to survive in the Great Lakes
- Information transferred to resource managers via meetings, presentations, and publications
- Long term biological data critical for invasive species management plans

Great Lakes Mississippi River Interbasin Study (GLMRIS)

- The USACE is studying the full range of options and technologies to prevent the spread on Aquatic Nuisance Species (ANS) through the Great Lakes and Mississippi River Interbasin Study (GLMRIS)
- GLMRIS is evaluating the CAWS and the 18 other pathways along the 1,500 mile Great Lakes and Mississippi River basins divide for 38 species

GLMRIS: Long Term Solutions

- Full Hydrological separation
- One-way or partial separation
- Treatment zone for all Aquatic Nuisance Species (ANS)
- Alteration of water quality
- Removal of ANS from a water body/harvesting
- Biocides for large scale use
- Additional controls currently in research and development

GLMRIS: Other Pathways

- No pathways given high ratings due to Asian carp
- Eagle Marsh high due to VHSV toward MRB; medium for Asian carp
- Two other locations in Ohio with medium ratings for Asian carp
  - Little Kilbuck
  - Ohio and Erie Canal at Long Lake

GLMRIS Focus Area 2 Background Eagle Marsh, Fort Wayne, IN

- Bighead carp retrieved from Wabash River at base of Roush Dam in 2004, approximately 25 river miles from basin divide
- IDNR Barrier to spread of adult Asian carp
- Locations of 100-year floodway across basin divide at Eagle Marsh
GLRI and Asian Carp Funding

- Over $1 billion GLRI dollars invested in the Great Lakes ecosystem to improve the health and environment of the area’s 30 million Americans
- Asian carp is an Administration priority
- More strategically using GLRI for long term solutions

<table>
<thead>
<tr>
<th>FY</th>
<th>Base</th>
<th>GLRI</th>
<th>Total</th>
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National Asian Carp Control Plan

- Prevent new introductions
- Prevent continued spread
- Population control
- Minimize adverse effects
- Research
- Education
- Implementation

Commercial fisherman with a boat full of Asian carp showing where the water line was hitting his boat.

THANK YOU

For more information

Please visit www.asiancarp.us
AWARDS RECEPTION AND DINNER

The Awards Reception and Dinner honored winners of the Great Lake Park Training Institute’s awards and scholarships. Information about the award winners follows.

Garrett G. Eppley Scholarship

Description

Named in honor of Dr. Garrett Eppley, a pioneer in park and recreation education. He served in various roles with the National Park Service and was a faculty member at Indiana University’s Department of Recreation, Park and Tourism Studies. The purpose of the scholarship is to provide stimulation and motivation for continuing education.

Awardees

- Dan Hebreard, Senior Ranger, Forest Preserve District of DuPage County
- Brooke Artley, Leisure Services Manager, St. Joseph County Parks

Trustee Awards

This award recognizes members of the GLPTI Board of Regents who have complete their terms on the board. With the presentation of this award, Regents become Trustees of the Institute and serve as their schedule allows. In 2013 the following Regents were recognized for their service and became Trustees.

- Steve Barker
- Bill Bauer
- Liz Geith
- Brian Huckstadt
- Cliff Morrison
- Richard Sobecki
- James O’Brien

Great Lakes Park, Facility, and Recreation Program Award

Description

This award, in part, is in honor of Daniel L. Flaherty. In the 1930s and early 1940s, Flaherty worked in the Chicago Park District. During WWII he was the director of Chicago’s service men’s center. After the war he returned to the Chicago Park District, eventually becoming general superintendent. During his term, the Children’s Zoo in Lincoln Park was constructed. He had a commitment to in-service training to the parks field. In 1948 he became chairman of the Great Lakes Park Training Institute. To honor his work, this award is presented to recognize facilities and programs completed within the last five years that represent the cutting edge of the leisure movement throughout the United States. The facilities and programs selected demonstrate innovative cost effective design, the utilization of community input and resources, and provide a significant impact on their community and agency. This year, we are proud to honor two exemplary facilities.

Awardees

- Marshbank Park, West Bloomfield Parks and Recreation Commission

The goals for this park were many and expansive. Preserving sensitive natural areas and protecting adjacent Cass Lake and its watershed. Design elements and materials were selected to reflect local materials, site context, durability, and aesthetic qualities. The park features 100% barrier free accessibility. Impressive notes include:

Geothermal process used to heat the Marshbank Lodge Park benches, piers, boardwalks are constructed of recycled materials, including milk jugs!
Naturalized storm water treatment filters sediment from runoff and encourages infiltration and evaporation. Marshbank Park serves as one example of the Parks and Recreation Commission’s commitment to improve the community and environment through energy and environmental conservation, efficiency, and renewable energy while still providing for world class recreational opportunities.

- African Elephant Crossing, Cleveland Metroparks Zoo

In 2006, Cleveland Metroparks Zoo committed to the expansion and renovation of its elephant exhibit that would elevate the Zoo to the top tier of Association of Zoo and Aquarium (AZA) accredited zoos in the care and conservation of the world’s largest land mammal.

The Zoo envisioned a world-class habitat and conservation center for African elephants. AEC was designed to: 1) increase the amount and complexity of space for elephants; 2) accommodate a larger and socially complete elephant herd; 3) measure educational outcomes that demonstrate attitude and behavior change; and 4) increase attendance and membership. AEC encourages the understanding of the elephant habitat, their plight in the wild and the need for local action that contributes to the sustainability of Zoo elephants and conversation of African elephants in the wild.

**Richard Lawson Award**

*Description*

This award is named in honor of Richard Lawson. It is presented annually to individuals who exemplify continued and significant contributions to the parks and recreation profession in the Great Lakes region. This year, we received nominations for a wide range of candidates from Indiana, Illinois, Ohio and Michigan.

*Awardee*

- Cindy Burkhour, Owner of Access Recreation Group, LLC

Cindy has been consulting in the areas of inclusive recreation, universal design and the Americans with Disabilities Act (ADA). She assists recreation providers to design universally accessible recreation facilities, programs and services and to comply with the ADA. She served on the U.S. Access Boards’ Recreation Accessibility Advisory Committee and the Regulatory Negotiation Committees on Access to Play Facilities and Access to Outdoor Developed Areas to establish the ADA compliance rules for recreation facilities.

Cindy developed & directed “Access Recreation: Creating Access to Community Recreation Opportunities for ALL Kids!” projects in Michigan and Missouri where she’s assisted in the development of collaborative relationships between schools, families and recreation providers to support the inclusion of students with disabilities in sports, leisure and recreation activities. She has also conducted ADA self-evaluations and developed transition plans for park and recreation facilities, programs and services to facilitate compliance with the Americans with Disabilities Act around the country. She developed and directed the “Access to Recreation Initiative” funded by a $15 million dollar grant from the W.K. Kellogg Foundation. The “Access to Recreation Initiative” is designed to assist local, regional and state level recreation providers to develop universal access to all recreation opportunities for all people, of all abilities, together.

Cindy has been active in working with persons with disabilities her entire life. She has a sibling, who has multiple physical and mental impairments and she is also the parent of a child who faces a variety of challenges after experiencing several massive strokes. She advocates professionally and personally for the rights of ALL people to be included in all aspects of community life.
Restoring Wetlands
February 27, 2013
8:15 AM-9:45 AM
Lake James Room

- Dr. Chuck Nelson, Associate Professor and Coordinator of North American Waterfowl Management Plan Implementation Committee in Michigan (Michigan State University)

After screening the Emmy Award-winning (2009) video “Restoring Wetland” that the presenter co-produced, the session will focus on identifying principles, procedures, and partners for restoring wetlands in park and recreation settings.

The presenter will share first-hand experiences with wetland restoration.

The session will conclude with a Question and Answer session for participants to focus on individual situations and opportunities.

This session was cancelled because weather did not permit the speaker to attend. Instead, GLPTI staff lead the participants in a discussion of what parks need to succeed in the 21st century.
Leadership and teamwork are keys to a successful organization. This session will review how to use one to get the other in a fast-paced workshop environment. Additionally, several strategies for dealing with “problem children” will be discussed.
Storm Water Demonstration Project
February 27, 2013
10:00-11:30 AM
Lake James Room

- Michael J. Donnellson, Jr., Chief of Park Facilities, Maintenance & Development (Oakland County Parks & Recreation)
- Brittany Bird, Natural Resource Planner (Oakland County Parks and Recreation)

This session will provide an overview of a storm water improvement project conducted by Oakland County Parks & Recreation. Topics covered include engineering, construction, and ecological benefits of capturing and filtering storm water from the parking lots, roofs, and grounds at Oakland County Parks & Recreation’s Administrative Offices and Waterford Oaks County Park.
Welcome
Great Lakes Park Training Institute
Pokagon State Park, Angola, Indiana
February 27, 2013
10:00am – 11:30am

Storm Water Demonstration Project
Oakland County Parks & Recreation Commission (OCPRC)
• Administration Complex
• Paradise Peninsula Play-scapes/Corporate Picnic Area

Michael J. Donnellon, Jr. LLA, ASLA
Chief of Park Facilities Maintenance & Development
Brittany Bird
Natural Resources Planner

Project Overview
Location:
• Waterford Oaks County Park (/55 ac.)
• Oakland County, MI
• Clinton-Main sub-watershed (70 sq. mi.)
• Pop. 243,000

Project Goals:
• Correct design flaws in infrastructure
• Add needed parking capacity
• Improve storm water quality

Project Design/Results:
• 3 water quality BMP systems added
• 61% increase in parking spaces
• 4% increase in impervious pavement
• 100% 1-10-yr storm storage reqs.
• 60% 100-yr storm storage reqs.

Project Overview
OCPRC – Administration Complex

Initial Purpose: Parking space expansion/asphalt repairs
• 92 existing parking spaces
• Installed 1972/1989
• Irregular shaped lot

Uses: OCPRC – Administrative Complex
• Administrative Building
  • Approx. 18 FTE/12 PTNE Staff
  • 30 parking spaces
• Commission/Visitor Center Building
  • Approx. 6 FTE/25 PTNE Staff
  • 31 parking spaces
• Recreation Programs & Services/Activity Center Building
  • Approx. 43 FTE/PTNE Staff
  • 43 parking spaces

Goals:
• Maximize allowable parking
• Limit/improve environmental impacts

Project Overview
OCPRC – Administration Complex

Initial Purpose: Renovation for shifting recreational trends
• 60 existing parking spaces
• Removal of under-utilized Court Games Area, including:
  • Tennis, Shuffleboard, horseshoes courts

Uses: Corporate Picnic Area/Playground Expansion
• 150 required paved parking spaces
• 49 required lawn parking spaces
• Non-traditional Barrier Free Playground

Goals:
• Maximize allowable parking
• Limit/improve Environmental impacts
• Design to complement surrounding natural environment/communities
• Provide education/interpretative areas.
**Common Design Elements**

- Administration Complex, Paradise Peninsula Play-scape & Corporate Picnic Areas
  - Increased Need for Parking
  - Infrastructure Upgrades Needed
  - Common Storm water Conveyance System

Common Elements Presented Opportunities for demonstrating “Best Management Practices” for Engineering and Storm Water Management, including:
- Funding/Grant Opportunities
- Water Quality Testing/Results Analysis
- Wildlife habitat improvements

---

**‘Playground’ Grant?**

OCPRC – Paradise Peninsula Play-scape

Simultaneous Grant-funded CIP Project
- Update Recreational Features in Court Games Area

Themed to
- MI Natural Communities
- Reflect Ecological Storm water Management

Provides Integrated Opportunity to
- Highlight and Interpret below-ground BMPs
- Backdrop for Interpretive Signage on S-W Improvements

| Grant Amount: $250,000 |
| Match Funds: $388,000 |
| Total Amount: $638,000 |

---

**Clean Michigan Initiative Grant**

Administration/ Paradise Peninsula Play-scape/Picnic Complexes

Best Management Practices:
- Dry Detention Basin
- Wet Ponds
- Porous Pavers/Pavement
- Underground Dry Detention
- Native Vegetation Restoration and Buffers
- Underground Stormwater Detention

Estimated Annual Load Reductions:
- Sediment – 16.35 tons/year
- Phosphorous – 151.22 lbs/year
- Nitrogen – 19.11 lbs/year

| Grant Amount: $190,000.00 |
| Match Funds: $620,109.52 |
| Total Amount: $810,109.52 |

---

**Storm Water – Existing Conditions**

OCPRC – Administration Complex

Captures 8.44 acres of Drainage

---

**Storm Water – Existing Conditions**

OCPRC – Court Games Complex

Captures 8.03 acres of Drainage

---

**Storm Water – New Storm Water Conveyance Design**

Storm Water Flow –

BEFORE

AFTER

Storm water redirected from original outlet to a natural body pond, through series of built BMPs
Design/Construction Process
OCPRC – Administration Complex

Completed Entrance Swale (dry detention basin) before grading operations.

Completed Porous Pavement before swale plantings.

Wet Pond BMP (3-Bay Swale) located behind Administration Building.

Completed Paradise Peninsula Play-scape / Corporate Picnic Area.
Pre-Construction Evaluation

ECT Pre-construction Water Quality Sampling

Methods
- 2 existing storm outlets installed with programmable automatic samplers
- 5 storm events measured
- Water samples collected within 24 separate 1-liter bottles at fixed time interval of 500 mL aliquots/30 min. once 0.1 ft of storm water was established in outlets
- Samples taken until rain event was complete or collection bottles filled
- Samples were composited on a flow-rated basis for each rain event
- Rainfall data collected from local rain gauge network

Lab Analysis & Calculations
- suspended sediment
- total phosphorus
- metals (copper, cadmium, chromium, arsenic and zinc)
- specific conductivity (aggregate measure of dissolved constituents)
- Run-off volume was calculated based on level data collected by the flow modules
- Daily pollutant loads were calculated

Pre-Construction Evaluation

ECT Pre-construction Water Quality Sampling - RESULTS

Results Summarized by Storm Event
- Run-off volumes & precipitation
- Individual & average daily pollutant loads

Calculated pollutant loads
- Annual Loads = lbs/yr
- Unit Loads = loads lb/acre/yr

Median Unit Loads will be used to compare to post-construction sampling values to quantify the water quality improvements realized by the installed Storm water Improvement BMPs.
Pre-Construction Evaluation
MDEQ BMP Estimated Load Reduction Calculations

Annual Load Reductions:
• Sediment – 16.35 tons/year (87.43%)
• Phosphorous – 151.22 lbs/year (70.23%)
• Nitrogen – 19.11 lbs/year (64.15%)

Restoration Process
Entrance Swale Planting – Administration Complex
• In-house, volunteer-designed
• Herbicide removal of weeds
• 3” compost
• Staff, volunteers, trustees installed
  • Blue flag iris
  • Swamp milk
  • Red-osier dogwood
  • Serviceberry

Restoration Process
Play-scape/Picnic Parking Lot Swales - Planting
Contractor – Installed Trees (2011)
  • Dawn Redwood, Bald Cypress

2012
A. In-house bed-prep/ cover crop seeding
  • Herbicide application – weed removal
  • Tilled-in compost
  • Seeded with annual rye
  • Erosion-control matting
B. In-house plug installation
  • Quart-sized native plants (Wildtype)
    • 1300 plugs/ 5-species
    • Blue flag iris, black-eyed Susan
    • Swamp milkweed, boneset, ironweed
    (CA anemone – border species)
C. Augmented with native seed of same species (MI Wildflower Farm)
D. Watered in-house by staff Su/Fall2012

MATERIALS COST: <$10K

Post-Construction Evaluation
OCPRC – Administration Complex
Preliminary Water Quality Monitoring Partnerships
• Oakland County Water Resources Commission
• Waterford-Mott High School – AP Environmental Science Class
• In-kind Partnerships

Official Post-Construction Water Quality Testing
• Contracted with ECT – Begins March/April 2013
• NTE $15,000

Restoration Process
Play-scape/Picnic Parking Lot Swales - Planting
Summer Installation 2012 - August

Growth – October 2012

Restoration Process
Play-scape/Picnic Parking Lot Swales - Planting
Contractor – Installed Trees (2011)

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MATERIALS COST: <$10K
Post-Construction Evaluation

OCPRC – Administration Complex

Preliminary Water Quality Monitoring Partnerships
- Oakland County Water Resources Commission
- Multi-probe Water Meter Data
- May 2011

Results of note:
- Reduction gradient for
- TDS, Specific Conductance, Turbidity
- Pond 1 → Pond 4

Water Meter Data indicates Ponds are effectively improving water quality through settling and filtration

Pollutant

3/22/11
3/23/11
4/7/11
3/26/11
0.48
0.11
0.27
0.56
LEVEL
5
6
7
0
0
0
0
5.75
4/8/11
3/28/11
3/22/11
3/23/11
4/7/11
0
0
0
0
0
4/6/11

Post-Construction Evaluation

Preliminary Water Quality Monitoring Waterford-Mott High School Classes

Methods
- Sampled Parking Lot Fore-bay and 3-Bay Swale System
- Final System outlet
- Stream Sampling – downstream from system outlet

Results
- Largely inconclusive/ inconsistent
- pH < 7 – health freshwater system
- E. coli detected multiple times (Canada Geese)

Overall Conclusions
- Results supported WRC prelim Water Meter Data
- Quantitative data to support continued management of Canada Geese

Invasive Species Control

3-Bay Swale Water Control Structure

- Analyzed as-built elevations in relation to invasive buckthorn extent
- Set Aquadam plates to hold water at desired elevation
- Documented water retention against plate levels and storm events

Proposed Methods
- Collect/ Analyze grab-samples from
  - Influent from Parking lot to forebay
  - Effluent from forebay to Pond 1
  - Effluent from Pond 4 to natural wetland
  - Effluent of Playscape BMPs at outfalls

Additional Post-Construct Evaluation Objectives
- Look at potential residual salt input issues
- Look for gradient of water quality improvement in 3-Bay Swale System

Post-Construction Evaluation

Administration/ Paradise Peninsula Play-scape/Picnic Complexes

Official Post-Construction Water Quality Testing
- Contracted with ECT – Begins March/April 2013
- NTE $15,000

- Compare Post-Construction Sample Results to:
  - ECT Pre-construction Baselines
  - MDEQ Projected Load Reduction Values
  - Goals:
    - 1) Improvement from baseline
    - 2) At or exceeding pollutant load reduction calcs

Methods

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  - MDEQ Projected Load Reduction Values
  - Goals:
    - 1) Improvement from baseline
    - 2) At or exceeding pollutant load reduction calcs

Post-construct samples Pre-construct baselines Projected load reductions

Areal Load for Clean Water

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<tr>
<th>Pollutant</th>
<th>Unit Load</th>
<th>Efficiency</th>
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<td>TSS</td>
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<td>TP</td>
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<td>TN</td>
<td>13.00 lbs/yr/acre</td>
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3-Bay Swale Water Control Structure

- Analyzed as-built elevations in relation to invasive buckthorn extent
- Set Aquadam plates to hold water at desired elevation
- Documented water retention against plate levels and storm events

Proposed Methods
- Collect/ Analyze grab-samples from
  - Influent from Parking lot to forebay
  - Effluent from forebay to Pond 1
  - Effluent from Pond 4 to natural wetland
  - Effluent of Playscape BMPs at outfalls

Additional Post-Construct Evaluation Objectives
- Look at potential residual salt input issues
- Look for gradient of water quality improvement in 3-Bay Swale System
Invasive Species Control

3-Bay Swale Water Control Structure
- Kept plates at elevation 2 growing seasons
- Photo-monitoring for buckthorn kill rate
- Fall 2009 – Fall 2012

Buckthorn - May 2011
Buckthorn - Sept 2012

Goose Control

Additional Built Water Features Attracted Canada Geese
- Traditionally not a management issue
- Post-construction goose numbers increased to nuisance levels
- Implemented dog control (2010 – 2012)
- Tested coyote decoys (2011 – 2012)
- Nest Destruction by Permit (2012)
- Permitted Round-up Planned (2013)

Wildlife Benefits

Documented
- Wood Ducks
- Great Egrets
- Blue Heron
- Marsh wren
- Spring Peepers
- American toad
- Green Frogs
- Snapping turtles
- Painted turtles
- Muskrat
- Sharp shinned hawks
- White-tailed deer
- Coyotes

Signage and Public Education

- 5 Interpretive Project Signs Throughout Project Area
- Native Plant Identification Signs – Court Games Swales
- Natural Area Restoration Signs – Retention/ Detention Buffers
- Walking Tours for staff, other county departments, consultants

Maintenance & Operations

Structural Maintenance
- Annual infrastructure inspections
- Porous pavement vacuuming
- Detention Pond Dredging
- Underground storage cleaning

Vegetative Maintenance
- Native buffer maintenance
- Invasive species control

Water Quality Maintenance
- Algae control
- Goose management
- Salt inputs
Question & Answers

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(248) 343-1353 Mobile
Disability Awareness Training
February 27, 2013
10:00-11:30 AM
Snow Lake Room

- Shay Dawson, Director (Bradford Woods)

This session will explore best practice approaches to working with clients and staff that have disabilities. Language, disability philosophy, programming considerations, and common interaction skills will be discussed and explored through both lecture and experiential learning.

Session Handout

Universal Design

- “Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without adaptation or specialized design.”
- Bradford Woods is a pioneer in universal design. Amphitheater, switchback trail, cabins, etc.
- Most facilities will change existing infrastructure or build new infrastructure for people with disabilities that is typically isolative and segregated, i.e., they can only sit in one spot at the movie theater or be in one part of a building.

Important Terms

The following are often misunderstood and misused:

- **Impairment** is an identifiable or functional condition that may be permanent or temporary.
- **Disability** is a condition resulting from an impairment that substantially limits one or more life activities.
- **Handicap** is a situational disadvantage or barrier imposed by the society, the environment, or oneself.
  1. A person who uses a wheelchair is handicapped when the only entrance to a building is a staircase.
  2. A person who is deaf is handicapped when watching a video where no captioning is made available.
  3. Reserve the word “handicap” for golf and horse racing
- **Special Needs**—when we mean the specific needs a person might have (that we all have) *Should not be used as a definition of a person with a disability.*
- **Chronological Age** a person’s actual age.
- **Developmental Age** a person’s current cognitive ability and developmental stage

*A person with a cognitive disability should always be treated in terms of their actual chronological age despite their childlike behavior.*

- **Dignity of Risk:** Overprotection may appear on the surface to be kind, but it can be devastating to development. We have learned (attribution theory) that there can be healthy development in risk taking including increases in confidence, independence, self esteem and self efficacy. Overprotection can keep people from becoming all they could become.

Some of the best achievements came the hard way through risks, falling flat, picking ourselves up and trying again. Sometimes we made it and sometimes we did not. Even so, we were given the chance to try.

Of course, we are talking about calculated risks. People should not be expected to blindly face challenges that, without a doubt, will explode in their faces. Knowing which chances are prudent and which are not -- this is a new skill that needs to be acquired. On the other hand, a risk is really only when it is not known beforehand whether a person can succeed...

In the past, we found clever ways to build avoidance of risk into the lives of individuals living with disabilities. Now we must work equally hard to promote calculated risks for healthy development.
• **Self-Fulfilling Prophecy** is a prediction or statement that becomes true in the life of the individual. Our words are powerful – childhood thoughts and beliefs are powerful. For example, “Johnny you are too sick to play outside. . .be careful you may get hurt. . .you have an illness and you are not like the other kids Johnny.”

**Disability Philosophy**

• We will work on not seeing a client’s disability first.
• Inclusion is important.
• Empowerment is important.
• Do not promote “learned helplessness” by doing everything for the client.
• Encourage self determination and intrinsic motivation by:
  1. Provide choices.
  2. Challenge by choice with permission to encourage.
  3. Include the individual in the decision making process.
  4. Let them direct their life course.
  5. Create opportunities for them to take part in activities and succeed.

**Person First Terminology**

– **Focuses on the person and not the functional limitation**
– **Person with a disability and not disabled person**
– **Child with Down syndrome, not the “downs child”**
• **The disability does not define the person.**
  – **Person who has hemophilia, not the hemophiliac**
  – **John has a physical disability, not he is disabled**
  – **Person with autism, not he is autistic**
• **Emphasize the abilities, not the limitations**
• **Uses a wheelchair, rather than confined to a wheelchair or wheelchair-bound.**
• **Has cerebral palsy, rather than afflicted with or suffers from.**
• **Walks with crutches, rather than crippled.**
• **Avoid euphemisms to describe disabilities**
• **Words such as partially sighted, handicapable, physically inconvenienced or challenged, mentally different are condescending and should be avoided.**
• **Do not portray as special, sensationalize, and give excessive praise and honor, pity.**
• **Do not label as a group--the blind, CP, retarded.**
• **Do not generalize.** All kids with Down syndrome are so cute and always are happy (some are very irritable and grumpy!)
• **Only use the diagnosis or disability when needed.** You are interacting with people, not their disabilities.
General Guidelines

- See the person for who they are, not their disability.
- Avoid pity...the majority of people with disabilities have come to terms with it. In fact, a great amount of those folks wouldn't change it.
- If the disability isn’t relevant, don’t use it.
- When discussing disability state, “He /she has _____” rather than “the down syndrome girl,” “that ADHD kid,” “retarded boy.”
- Avoid using the word “normal.”
- Avoid using the phrase “special needs.”
- Avoid saying “That is so retarded.” “You retard.”
- Eliminate emotionally-charged, negatively connotative words.
- Do not be extra kind/sweet b/c they have a disability. Treat them like you would any other person.
- Ask before you help, i.e., you should never touch a person’s wheelchair or adaptive equipment without asking first.
- Be careful of putting your hand on a person’s head who is sitting in a wheelchair.
- Emphasize abilities, not limitations.

Adaptations

- Ask the person for adaptations that they have used in the past
- Ask if they have adaptive equipment with them
- Change an activity only as much as you need to for the client to take part
- Keep in mind it is sometimes trial and error
- Get the participants feedback before you begin as well as after they have participated

Programming Considerations for Specific Disability Groups

- Cognitive and Developmental Disabilities
  1. Keep directions clear and check for understanding.
  2. Limit times when reading is needed to complete the activity, present information to meet the developmental need.
  3. Speak simply, not loudly, not childish.
  4. Use different types of techniques (visual, tactile, etc.) when explaining or presenting.
  5. Give participants opportunities to ask questions and/or express concerns, fears, etc.
  6. Allow enough time to complete the activity.
  7. Keep directions and processing concrete.

- Behavioral
  1. Provide clear expectations of behavior.
  2. Use structure to be proactive.
  3. Allow an opportunity to assist.
  4. Reinforce appropriate behavior.
  5. Opportunity to thrive in experiential and active environments.

- Attention Deficit Disorders
  1. Change the pace of activities.
  2. Empower all to be successful and thrive in our experiential environment.
  3. Position yourself in close proximity to the individual.
  4. Encourage active participation! Keep it active.
• **Hearing Impairments**
  1. Be aware of “cultures” of people who are deaf or hearing impaired.
  2. Position yourself so the individual can see you.
  3. Avoid turning your back or excessive moving around while speaking (circle, half circle?).
  4. When using an interpreter: Talk to the person. Work with the participant and the interpreter.

• **Visual Impairment**
  1. Allow person to explore the environment.
  2. Ask person how he or she prefers to communicate.
  3. Verbalize written materials or allow person to see information up close.
  4. Present in concrete and hands-on way.
  5. When helping the person walk, let them grab your arm.
  6. Never touch a therapy dog that is working as it may distract the dog.

• **Physical Disabilities**
  1. Simply enable access to the area that activity is taking place. Often times this is the one consideration that is needed, but often not considered.
  2. Distinguish between expressive and receptive language abilities. Do not assume.
  3. Ask the person what, if any, special adaptations or equipment might help to be able to fully anticipate.
  4. When talking for an extended time with a person who uses a wheelchair, take a step back or place yourself at his or her eye-level.
  5. Openly discuss uncertainties on when and how to assist the person.
  6. Allow some extra time to complete some tasks.
  7. Be aware of fine motor and gross motor skills abilities.

**Overall Thoughts and Considerations for Diagnoses**

• Familiarize yourself with the disability and/or diagnosis.
• Consider the individual – the diagnosis does not tell the whole story.
• Do not make assumptions or generalize needs.
• The purpose or intent of the activity should not change.
• Focus on abilities.
DISABILITY AWARENESS
APPROACHES TO SUCCESSFUL PROGRAMMING AT YOUR FACILITY

Shay Dawson, M.A., CTRS
Bradford Woods

Overview

- Explore common misconceptions and behaviors
- Explore best practice approaches (psycho-social environment and physical environment)
- Discuss both inclusion and disability specific programming

Labeling Activity

- Break up into groups
- Label on forehead
- Play a game of UNO
- Treat the person according to their label

Person First Approach (Psycho-social Environment)

- Person First Language
- Chronological Age Vs. Developmental Age
- Empathy, Empowerment, and Engagement (3 E’s)
- Build Self Determination / Intrinsic Motivation
- Dignity of Risk

Universal Design (Physical Environment)

- Outdoor Picnic Table and Fire Pit

Universal Design Continued…
Programming Considerations

**Disability Specific**
- Individuals with the same or similar disability participate in programming together that is specifically designed for their unique needs

**Inclusive**
- Individuals with disability participate with reasonable accommodations with others that do not have a disability
Disability Specific Programming

- A supportive and safe environment to grow
- Others understand you
- Social Comparison Theory = natural human desire and it can be therapeutic for those with medical conditions


- Adults with Cerebral Palsy
- Some attending programming since they were youth
- Five Emerging Themes
  1. Community (overwhelming response to this category)
  2. Place to have fun
  3. To participate in outdoor recreation
  4. Independence
  5. A needed respite from their families / caregivers


- Youth with cranial facial differences
- Rosenberg Self Esteem Scale
- Statistically significant findings for social acceptance and self esteem


- Statistical significance for improved self-esteem
- Five Emerging Themes:
  1. Supportive Community
  2. Sense of Normalcy
  3. Positive Recollection
  4. Memory of an Activity

“...I just want to be normal, and at camp I can be. I guess that’s really why I love camp.”

Disability Specific Camps: Examining Social Acceptance and Quality of Life (in progress)

- Camp Little Red Door = 38 campers with cancer and their siblings
- Camp Riley= 51 youth with physical disabilities
- Camp HEAR Indiana = 38 campers with cochlear implants or hearing aids


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“...I just want to be normal, and at camp I can be. I guess that’s really why I love camp.”

Results

- All camps displayed a relationship between QOL and Social Acceptance
- Camp HEAR Indiana: showed difference in QOL and Social acceptance from the beginning of camp to the end of camp.
- Statistical significance findings at 6 month follow-up for Quality of Life (Camp Riley) and Social Acceptance (HEAR Indiana)
In their own words...

A supportive therapeutic community – a respite from the pressure of childhood illness

“These are my war buddies”

“It just reminded me that I can do anything I want to in life, no matter what.”

“I just feel (silence) happy there, like everything is going to be okay, even if it isn’t.”

Disability Specific Programming…Take Home Message

- Increase feelings of Social Acceptance, Self Esteem, and Quality of Life
- Fosters a unique therapeutic and supportive community for those with disabilities and chronic illness. Perhaps the only time they feel “normal”.
- The impact of these programs may go well beyond their duration

Inclusion

What is it?

- Integrating people with disabilities into recreational programming with individuals that don’t have a disability

How do you do it?

- Assess Barriers to Leisure
- Reasonable Adaptations to existing programs
- Inclusion Specialists (CTRS)
- Facilitate Choice and Self Determination
- Education of staff, families, clients, and participants

Programming Research

Examples of Sustainable and Successful Inclusion Programs:

- Fitness and Recreation for Everyone (Weirs, 1988) – integrated volunteer participation and education through local non-profit
- Every Buddy (1992) – YMCA Program = high - praise from participants and parents. Cost effective program for the YMCA
- Bankshot (1991) Modified basketball so everyone can participate. Now being played at 60 sites nationally
- Montgomery (1992) Children with and without disabilities have increased success with integration and acceptance of disability when they share a recreational experience
- Acting Together (Miller, Rynders, & Schleien, 1993) studied the benefits of drama class as a successful way to help individuals with disabilities work on social skills in an integrated setting

In Closing…

- Person First in all interactions (see the person not the disability)
- Build the physical environment for success (universal design)
- There is great value in providing both inclusive and disability specific programming

Resources

- National Inclusion Project
- National Center on Accessibility
- National Center on Physical Activity and Disability
- Bradford Woods
- RHI Sports Clinic
- SPLORE
- Challenge Alaska
- Wilderness Inquiry
Recipe for “Sixcess”: Driving for Results in the Public Sector Using 5S Philosophies

February 27, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Snow Lake Room

Applicable Education Track(s): Facilities/Maintenance
• Joe Fausnaugh, Park Services Manager (Toledo Area Metroparks)

Find out how Metroparks of the Toledo Area is using 5S philosophies in cross-functional teams, prioritization of projects, clearly articulated standards, and a systematic audit process to drive continuous improvement and employee ownership of their new “Sixcess” program.

Why are we here?
ZERO

6-S Goals
• Make each person’s job easier
• Become a successful manager of your job and workplace
• Ensuring the safety of staff and visitors
• Ensuring organizational excellence

WHAT IS Sixcess?
Hiroyuki Hirano is the father of 5 S
Developed as part of an overall production approach.
Commonly referred to as: Lean production
Popularized in the West in the 1980s

The 6-S’s
Seiri               Sort
Seiton           Set in Order
Seiso                           Shine
Seiketsu                      Standardize
Shitsuke            Sustain
Safety

First S: Sort/Organization
Distinguish between what is and what is not needed.

Yellow Tag

Recipe for Sixcess

Second S: Stabilize/Orderliness
A place for everything and everything in its place.
The Visual Workplace Vision

The **30** second rule

Sources of Contamination and Disorder

- debris
- insects
- accumulation
- dirt and dust
- food
- water
- documents
- poor work habits
- drink
- materials left out

Third S: Shine/Cleanliness

Clean Everything

Fourth S: Standardize/Adherence

Create the rules.

Fifth S: Sustain

Stick to the rules.
Re-evaluation

The 6S: Safety

Creating a culture of safety, where employees regularly demonstrate safe work practices & precautions.

6S SAFETY

• Focuses on eliminating hazards and creating a safe environment to work in
• Once the workplace has been organized and cleaned, potential dangers become easier to recognize

2013 Proceedings 127
6S Tool Kit

Important forms
- Project Process Checklist
- Yellow Tag Procedure
- Safety Checklist
- Audit Checklist

6S Areas

Priority Areas
- Offices
- Restrooms
- Trails
- Shops
- Rental facilities
- Storage areas
- Reception areas--ticket booth, paddle boat, VC, Admin office
- Meeting areas
- Park entries
- First aid kits

Secondary Areas
- Picnic areas
- Vehicles
- Flower beds
- Parking lots
- No mow areas
- Map areas
- Retail areas
- Bulletin boards
- Windows on Wildlife
- Vending areas

Driving for Results

Motion Map

Task Analysis
Fleet Initiatives

Driving for Results

6S’ing a fleet?
- Created system to review all fuel card data
- Conducted detailed review of current fleet
- Evaluated costs of different vehicles to organization
- Scheduled replacement of trucks with utility vehicles & electric vehicles based on results

6S’ing electric meters?
- Inventoried all meters & reviewed history
- Created system to review regular consumption
- Assigned owners
- Created reduction goals & tips
- Implemented projects / marketing
  Vending misers
  Lighting retrofits

Fresh Results

Fleet Savings $19,524
Mowing Reduction (acres)- $12,782
Mowing Reduction (time)- $6,650
Cleaning Reduction (time)- $10,100
Electrical Reduction $26,710 $75,766

Be prepared for a new way of life!
Q & A

Joe Fausnaugh – Chief of Operations
419-407-9744
joe.fausnaugh@metroparkstoledo.com
Ball Field Maintenance: New Techniques
February 27, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Crooked Lake Room

- Todd King, Superintendent of Parks and Planning (Schaumburg Park District)
- Daniel Otto, Deputy Director (Schaumburg Park District)

This session will explore new products and techniques that will make your ball fields play better with less maintenance.

Ball Field Maintenance: New Techniques
Great Lakes Park Training Institute
February 25, 2013

Todd King – Superintendent of Parks and Planning
Dan Otto – Deputy Director

What we’ll talk about.

- Introduction
  - Welcome!
- Laser Grading
  - Photographs
- “Hilltopper” Infield Mix
  - Photographs
- Artificial Turf Infields
  - Photographs
  - Maintenance Photographs

Laser Grading

Schaumburg
PARK DISTRICT
“Hilltopper” Infield Mix
Artificial Turf Infields

Arlington Heights Park District

Mekas Park
Artificial ‘Turf’ Improvements

October 3, 2012

1. Header
   - Project
   - Client
   - Consultant
   - Date

2. Construction
   - Excavation
   - Site Preparation
   - Turf Installation
   - Infield Installation
   - Grade
   - Drainage
   - Lighting
   - Seeding

Stockpile Infield Mix Offsite

Remove Infield Mix
Artificial Turf - Maintenance
ADA at the Arlington Heights Park District 2005–Present
Lake James Room
February 27, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)

• Patricia Klawitter, Training/Safety Specialist (Arlington Heights Park District)

In 2005, the Arlington Heights Park District signed a contract with the National Center on Accessibility (NCA) to conduct a facility assessment. Since that assessment, the District has embraced the Universal Design concept for all Americans with Disabilities Act modifications and new construction. This session will review how the District has used Universal Design and provide best practices that can be utilized in other park and public lands agencies.
Work can keep you busy and stressed. You got into the park business because it was supposed to be FUN. Discover four tools that can help you rediscover the passion of the parks before it’s too late. Attendees will talk, write, laugh, and maybe even cry during this session, which is designed to help refocus priorities, reignite passion, set goals, and get in touch with how wonderful working in the parks can be.
VENDOR SOCIAL
February 27, 2013
6:30 PM-10:30 PM
Lake James Room

The 2013 Vendor Social featured a western theme. Participants were encouraged to wear their best western clothing for the event. A western style photobooth, western inspired food, and western music accompanied the event. The social featured a dinner, bar, cornhole/bags contest, and vendor booths set up by GLPTI sponsors.

Great Lakes Park Training Institute Board of Regents and Staff
Cornhole Tournament
How to Make Your Eco-Restoration Project a Success

February 28, 2013
10:00 AM-11:30 AM
Crooked Lake Room

- Doug Bauer, Vice President (Pizzo and Associates)
- Jason Lewis, General Manager (Pizzo and Associates)

Ecological restoration is a practice rife with misconceptions. Key to overcoming them is proper budgeting, expectation setting, and stakeholder assessments prior to project kick-off. Ensure that your park’s prairie becomes reality in perpetuity!
Hire Slow, Fire Fast
February 27, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Lake James Room

• Erick Kleinert, Human Resources Director (Indiana Department of Natural Resources)

Knowing when to let somebody go can be difficult. This session will provide participants with key points on how to identify employees that underperform and are malcontented in your organization and how to determine when it is time to sever the employment relationship with these individuals. The session will conclude with an examination of strategies that you can use to select the best course of action in removing employees from your organization.
Hire Slow, Fire Fast

Eric Kleinert, HR Director, Indiana DNR
February 2013

Program Agenda
1. Identify malcontents & underperformers in your organization.
2. Understand how to address these issues.
3. Applying counseling and training to select situations.
4. Review alternatives to involuntary termination.

Co-workers & Employees can make us miserable

When they cause conflict or don’t do their job

To fix it stop hiring jerks

Instead employ decent folks who care about your organization
Resolve **conflict**

Use accountability to **strengthen** the team

Time devoted to **problem employees**
is time lost to the rest of the team

Manage everyone in the manner that they **merit**

Identify malcontents & underperformers in your organization

**Eric’s List of Potential Short-term Employees**

1. Bad hires
2. Employees engaged in misconduct
3. Bypassed employees
4. Institutionalized employees

(In order of likeliness to be terminated.)
Bad Hires

I was a bad hire

Knowledge
Skills
Abilities

Missing

Present

Must have Knowledge, Skills and Abilities in 2013

- Knowledge of park features & operations
- Customer service skills
- Ability to take direction
- Ability and willingness to adhere to safety policies
- Problem-solving abilities

Dishonest Applicants

- 8-53% of resumes contain embellishment or lies
- 33% of higher education qualification are falsified
- 25% of work histories are falsified

Post-Employment References
Bad Fit

Is Dwight Schrute a Bad Fit?

Cost of a bad hire

- Time + resources spent recruiting & hiring
- Salary + benefits
- Training including lost productivity of trainers
- Time + resources spent assessing & addressing the issue

“A bad beginning makes a bad ending”
Eupirides, Greek Scholar

The best course of action

Misconduct

You’re FIRED!
**Misconduct definitions**

- **Doing something you ought not to do.**
- **Conduct which adversely affects the efficiency of the operation.**
- **Intentional bad behavior by an employee. This does not include low productivity, poor judgment, or inadequate performance.**

**Employees’ Duty to Employer**

- **Loyalty**
- **Obedience**
- **Care**

**NFL Player fired for insubordination**

*Negligence* is "the failure to use ordinary care" through either an act or omission.

**Insubordinate conduct**

- **Lack of Communication**
- **Harassment & Intimidation**
- **Feigned Misunderstanding**

**Safety Violations**
Employee Disagreement

Misconduct?

Bypassed

Misconduct?

Misconduct?
You are a lifelong learner!

“L” for effort?
1. Both parties have a stake in achieving results.
2. Employees must actively seek out enrichment opportunities.
3. It is ok to struggle.

Parks rely on “Loyal Soldiers”

Take care of your “Loyal Soldiers”

- The Loyal Soldier label emphasizes hiring and retaining loyal employees who do whatever the organization asks of them.
- People are recruited and hired because they fit the organization culture and because of their potential to become loyal employees.
- Efforts are made to satisfy the needs of employees and build a strong bond that reduces the likelihood of employee turnover.

Institutionalized

These prison walls are funny. First you hate ’em, then you get used to ’em. Enough time passes, gets so you depend on them. That’s institutionalized. They send you here for life, that’s exactly what they take. The part that counts anyways. - Ellis Boyd “Red” Redding
Identifiers

<table>
<thead>
<tr>
<th>KSAs</th>
<th>Co-workers</th>
<th>Minimum effort usually yields acceptable results</th>
</tr>
</thead>
<tbody>
<tr>
<td>undiminished but underutilized</td>
<td>are friends and not teammates</td>
<td></td>
</tr>
</tbody>
</table>

Gallup G12 Engagement Survey

- In the last seven days, I have received recognition or praise for doing good work.
- There is someone at work who encourages my development.
- At work, my opinions seem to count.
- The mission or purpose of my organization makes me feel my job is important.
- In the last six months, someone at work has talked to me about my progress.
- This last year, I have had opportunities at work to learn and grow.

Includes all segments

Evidence of Engagement

- Staff feel personally involved
- Employee wants to improve
- Change means better things to come
- “Can do” mentality
- High level of trust in management

Evidence of Institutionalization

- “Only do what I have to do”
- Just a job
- Perceives change as dangerous
- “Things are too hard” mentality
- Distrust of manager’s intentions

Re-engagement strategies

- Be direct with the employee when explaining the need for these changes.
- Mentoring
- Role Changes
- Leadership Rotation
What path to take?

- **Training**
- **WIP**
- **Counseling**
- **Discipline**

**Training** by Specialty:
- **Bypassed Employees**
- **Institutionalized Employees**
- **Bad Hires**
- **Misconduct**

**Training in 2013**
- Web Forums
- Online Classes
- Video
- Traditional Classroom
- Peer-to-peer

**Work Improvement Plan (WIP)**
- Primary use is to address deficiencies in knowledge & skills
- Second best use is to document that employee has the ability to perform but chooses not to
- Weakness based management

**WIP In Action**

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Great Lakes Park Training Institute
Bad Hires
Institutionalized Employees

Employee Discipline

The continuing process of aligning employee behavior with employer expectations

Employee Input Worksheet

Employee Input Worksheet
The purpose of this document is to involve you in the process of considering the appropriateness/inappropriateness of your work behavior. The insights that you share will be an important step in reaching a resolution. Please complete each question thoughtfully and completely.

1. Describe, as you understand it, what you did or said that is causing concern.

2. Have you ever done this before?

3. What policy or general work principle did your behavior violate?

Counseling approach
Trust
Relationship Driven
Accepts Weaknesses
Employee Determines Outcomes

Employee Discipline

Due process in the workplace
1. Employee has the right to know what is expected of them.
2. Employee understands the consequences if they fail to meet management’s expectations.
3. Discipline must be based on facts.
4. Employee should have the right to present their side of the story.
5. The punishment should be consistent with the nature of the misconduct.

Due process in the workplace

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2. Have you ever done this before?

3. What policy or general work principle did your behavior violate?
Progressive discipline

Letter of Reprimand
Suspension (In-lieu)
Suspension (Long-term employees)
Termination

Step up, bailout, or meltdown

The burden of the stone forces a reaction.

Maintain your resolve

Our manager doesn’t have the guts to fire me. This place would fall apart without me.

I hope our manager follows through. We are having a party when this loser is gone.

Discipline

<table>
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<th>By-eyed Employees</th>
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</table>

Involuntary Demotions

- Confirm that the employee being demoted has the necessary KSAs to succeed in the new position.

- Move outside their chain-of-command.
- Decrease in salary is fundamentally necessary.
Demotions that make sense

Demotion or Reassignment

<table>
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<th>Bypassed Employees</th>
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<tbody>
<tr>
<td>Most</td>
<td>Least</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Retirement as an option

Employees may self-elect to retire rather than face demotion, discipline, etc.
1. Do not treat as a threat but as a life choice.
2. Celebrate their contribution to the organization.
3. May consider allowing them to use some excess personal or vacation prior to their retirement.

Eric Kleinert
Director of Human Resources
Indiana Department of Natural Resources
Desk- 317.232.4032
Cell- 317.775.7748
ekleinert@spd.in.gov
It’s Easy Being Green
February 27, 2013
1:00 PM-2:00 PM (Repeated at 2:15 PM)
Snow Lake Room

- Kristi Solberg, Park Specialist (Naperville Park District)

This session is focused on the green initiatives of the Naperville Park District. Park operations and the day-to-day changes that can help an organization function in an environmentally responsible way will be explored. Attendees will learn about changes that worked, changes that did not work, and the costs the district incurred in its endeavors. Topics will include organic fertilizers, algae control, biodiesel, environmentally friendly greases, hydraulic oils, and no-mow areas.

Naperville Park District’s Green Team
- Began in 2009
- Made up of staff from each department
- Mission: to track green initiatives and tell our story

Green Team Benefits & Results
- Cost savings and environmental benefits
- Awareness and awards
- Support for new initiatives

Grants for Green Practices
- IEPA Section 319 Grant – water quality improvements: Pervious paver parking
- IEPA Section 319 Grant – water quality improvements: 10,000 gallon cistern
Grants for Green Practices

A Framework: Listing Priorities

- Purchase and Use of Environmentally Safe and Sensitive Products
- Reduction and Handling of Waste
- Effective Use and Protection of Air, Water, Soil, and Wildlife
- Environmental Education & Interpretation
- Effective Use of Energy Resources

Purchase and Use of Environmentally Safe and Sensitive Products

Purchase products for use in facility and park operation which minimize negative environmental impacts, taking into consideration the effects of product production, use, storage and disposal.

Paper Analysis

### Naperville Park District '08 – '09 Paper Use Evaluation

<table>
<thead>
<tr>
<th>Product</th>
<th>2008</th>
<th>2009</th>
<th>Savings from '08 to '09</th>
<th>Trees Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Paper</td>
<td>1,145,000</td>
<td>770,000</td>
<td>$2,787</td>
<td>45</td>
</tr>
<tr>
<td>Brochure Paper</td>
<td>3,000,000</td>
<td>1,320,000</td>
<td>$25,959</td>
<td>201.6</td>
</tr>
<tr>
<td>Miscellaneous Paper</td>
<td>65,000</td>
<td>12,290</td>
<td>$16,205</td>
<td>6.3</td>
</tr>
</tbody>
</table>

**Totals:** 4,210,000 sheets 2,102,290 sheets $44,951 savings to the PD 252.9

Paper Analysis Continued

### Naperville Park District '10 – '11 Paper Use Evaluation

<table>
<thead>
<tr>
<th>Product</th>
<th>2010</th>
<th>2011</th>
<th>Savings from '10 to '11</th>
<th>Trees Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Paper</td>
<td>575,000</td>
<td>490,000</td>
<td>$316</td>
<td>14.3</td>
</tr>
<tr>
<td>Brochure Paper</td>
<td>1,320,000</td>
<td>1,320,000</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>Miscellaneous Paper</td>
<td>12,290</td>
<td>12,290</td>
<td>$0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Totals:** 1,907,290 sheets 1,822,290 sheets $316 savings to the PD 14.3

Paper Use Reduction Tactics

- Office Paper switched to 30% recycled
- Trees needed to produce paper used by NPD in 2010: 504 trees*
- Trees needed to produce paper used by NPD in 2011: 251 trees*
- *1 tree (40’ tall with a 6” DBH and approx. 25 years old) = 8,333 sheets of paper

**Difference of 253 trees!**
Reduction & Handling of Waste

Waste Audit #1

- February 26, 2009 SCARCE helped conduct a waste audit for PAD (Planning and Development Department)
- After about 5 days of collecting trash, there were 13.37 lbs of trash, 43 lbs of foam core boards, and 23 lbs of recyclable materials in the building
- Of the 13.37 lbs of trash, 4 lbs or 30% should have been recycled

Results:
- Awareness!
- We found a place to donate the foam core.
- The planning department changed their policy on playground equipment submittals. Manufacturers now submit their designs on 24 x 36” paper and they are clipped to reusable foam core boards.
- The RFP for our waste hauler contract was altered to require a service to recycle plastics 1-5, glass, metal, paper and cardboard. They also pick up batteries and CFL’s

Waste Audit #2

- May 28, 2009 SCARCE helped conduct a waste audit for Central Parks (includes public park waste, pre school, fleet and central park staff facilities)
- Collected approximately 6 days of trash and volunteers sorted through 397 lbs of trash and 42 lbs of recycling.
- Found that 26% of the garbage consisted of articles that could have been recycled.
- Found 57% of the items in the recycling bins were not recyclable.

Results:
- Awareness!
- Recycling stickers for each recycling bin
  - Worked with volunteer group to cut lids, attach handles, paint and apply sticker
- Knowledge of preschool clean up
  - Left over toys can be donated rather than put in the trash

Waste Audit #3

- May 28, 2009 SCARCE helped conduct a waste audit for Central Parks (includes public park waste, pre school, fleet and central park staff facilities)
- Collected approximately 6 days of trash and volunteers sorted through 397 lbs of trash and 42 lbs of recycling.
- Found that 26% of the garbage consisted of articles that could have been recycled.
- Found 57% of the items in the recycling bins were not recyclable.

Reduction & Handling of Waste

Reduce waste production, reuse and recycle materials from facility and park operations, and handle hazardous and all other wastes according to lawful and safe procedures.
Effective Use and Protection of Air, Water, Soil, and Wildlife

- Actively seek and implement ways to conserve and protect water and soil, enhance air quality, limit the production and release of damaging pollutants, and protect wildlife.

Pioneer Park - 2008

Results:

Audubon Certification Results:
Pioneer Park - 2008

Pioneer Park - 2010

2011

May Watts Park - 2011

Education & Interpretation

Resident Education

University Heights Park Natural Area

- Actively seek and implement ways to conserve and protect water and soil, enhance air quality, limit the production and release of damaging pollutants, and protect wildlife.

Staff Education

Premium Diesel Fuel
Bio diesel
Plant derived diesel fuel made from vegetable, peanut, soy or canola oils

6 Greenhouse Gases

- **Carbon dioxide (CO2)**: CO2 is produced naturally by living organisms and by the burning of fossil fuels. As a plant, such as soybeans grow, they take in carbon dioxide from the atmosphere. The same amount of CO2 is released back into the atmosphere when the plant is burned. This process is referred to as being “Carbon Neutral.”
- **Methane**: Methane comes from coal formations and from livestock digestive processes, decomposing waste, and wetland rice cultivation. In 1990, methane accounted for almost 12% of the US total emissions.
- **Hydrofluorocarbon gases (HFC)**: These gases were developed largely as an alternative to ozone-damaging chlorofluorocarbons (CFC) banned under the 1987 Montreal Protocol.
- **Perfluorocarbons (PFC)**: Result as a by-product from aluminum smelting, and uranium enrichment. Also are manufactured to replace CFCs in making semiconductors.
- **Sulphur Hexafluoride (SF6)**: Largely used in high voltage equipment and to assist the manufacturing of cable cooling systems.
- **Nitrous Oxide (N2O)**: Naturally occurring, N2O is produced by fuel burning and in fertilizer manufacturing.

Illinois Alternate Fuels Rebate Program

The Illinois Alternate Fuels Rebate Program started in 1998 and over $4.2 million has been issued through 2008. Anyone located in Illinois who owns an alternate fuel vehicle registered and operated in Illinois is eligible for this program, including individuals, businesses, local governments, and organizations. The only entity not eligible for this program is the federal government. Rebates may be issued to any applicant for up to 300 vehicles.
Synthetic Motor Oil

“Oil right!”
Vehicle # | Mileage | Total Running Hours | Idle Equivalent Hours (Total Running Hours x 40) | Ratio
--- | --- | --- | --- | ---
5 | 14,680 | 1,417 | 56,680 | 3.86
21 | 17,080 | 1,180 | 47,000 | 2.76
24 | 20,514 | 2,171 | 86,840 | 4.17
30 | 15,000 | 1,095 | 43,800 | 2.81
31 | 16,950 | 1,150 | 47,600 | 2.48
33 | 21,020 | 1,395 | 55,800 | 2.65
35 | 20,625 | 1,705 | 68,000 | 3.34
36 | 20,042 | 1,960 | 87,360 | 2.88
40 | 6,950 | 533 | 21,320 | 3.07
42 | 6,900 | 598 | 23,520 | 4.00
55 | 41,300 | 2,184 | 87,360 | 2.25
120 | 12,080 | 1,271 | 30,840 | 3.06
122 | 11,900 | 1,190 | 48,640 | 3.34
128 | 11,300 | 1,050 | 40,400 | 3.88
129 | 10,100 | 795 | 31,800 | 3.15
130 | 15,700 | 872 | 43,840 | 2.22
132 | 13,700 | 1,224 | 46,080 | 3.51
134 | 13,500 | 1,067 | 42,680 | 2.48
135 | 13,000 | 1,369 | 54,760 | 3.97
136 | 10,010 | 1,123 | 48,200 | 4.00
140 | 10,100 | 1,400 | 38,400 | 3.06
147 | 8,500 | 851 | 29,200 | 3.43
148 | 5,900 | 511 | 23,360 | 4.58
176 | 17,990 | 1,768 | 69,160 | 4.04

Readily biodegradable

Size Does Matter
10 Eco-Driving Tips

- Check your tires
- Choose the right oil
- No idling
- Accelerate and brake smoothly
- Be kind to your vehicle
- Travel light
- Minimize use of heater and air conditioning
- Close windows at high speeds
- Consolidate trips
- Slow down and watch speed
Rinse water recycling system
1 Tree = 2 People

We all make a difference

Contact Information:
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Questions & Comments