

FULL REPORT
Youth Recruitment and Retention

**REPORT OF THE YOUTH RECRUITMENT AND RETENTION COMMITTEE
of the NATURAL RESOURCES ADVISORY BOARD to the
ILLINOIS DEPARTMENT OF NATURAL RESOURCES and
CONSERVATION CONGRESS**

October 19, 2009

I. Executive Summary

The Youth Recruitment and Retention Subcommittee of the Natural Resources Advisory Board (NRAB) held public meetings to discuss how to improve youth participation in Department of Natural Resources (DNR) activities to foster the next generation of conservationists in Illinois, and develop a report to be heard by the Conservation Congress. This issue was chosen by NRAB because trends in youth outdoor activities have declined and DNR needs to address the declining constituent dilemma. Past generations were more connected with the outdoor world. Today, the population of the U.S. has shifted to more metropolitan areas where entertainment is found primarily in screen media. This affects DNR's support base because the Agency depends on license revenues for traditional outdoor activities. Throughout the state, many non-governmental organizations are working to address the diminishing numbers of young conservationists and environmental advocates. Partnerships are being forged to offer numerous education, recreation, and conservation activities for youth and families. Despite these efforts, the number of participants continues to decline. Barriers are identified as lack of interest, competition with other activities and responsibilities, misunderstanding of the outdoors and nature, lack of access and opportunities, and perceived lack of skills necessary to participate in outdoor activities. To address these barriers and bring more youth into the conservation field, the Youth Recruitment and Retention Subcommittee makes the following four recommendations.

Recommendations

- Educate, in schools and through informal programs, youth on conservation issues and natural resources.
- Market, promote, and advertise existing programs and activities.
- Develop, with non-government partners, a mentoring program that will pass on the hunting and outdoor traditions.
- Improve access to land, people, and resources that offer recreational and educational opportunities for youth.

II. Introduction

The Youth Recruitment and Retention Subcommittee of the Natural Resources Advisory Board was chaired by Mr. Richard Mark, Natural Resources Advisory Board and co-chaired by Mr. Michael Howard, Fuller Park Community Development. The committee members included Glynnis Collins, Prairie Rivers Network; Elizabeth Hagen-Moeller, Environmental Education Association of Illinois; Kent Adams, National Wild Turkey Federation; Aaron Kuehl, Pheasants Forever and Quail Forever; and Tim Presley, Presley Outdoors.

The Youth Recruitment and Retention Subcommittee held public meetings in Springfield, Godfrey, Rockford, Moline, and Glencoe to discuss how to improve youth participation in Department of Natural Resources (DNR) activities to foster the next generation of conservationists in Illinois, and develop a report to be heard by the Conservation Congress. These public meetings were held because it is important to DNR to be open, inclusive, and engage the public to help guide the Agency. DNR has suffered through the last 6-8 years with budget cuts, hiring freezes, and staffing vacancies. Since Governor Quinn took office, the Agency has been working to restore relationships with constituent groups. Conservation Congress is being reestablished to engage the public through the Natural Resources Advisory Board. Constituent involvement is critical to break the momentum of the last 6 years.

Trends in youth outdoor activities have declined and DNR needs to address this to maintain the Agency over the next several decades. It was much easier for past generations to connect with nature as children. Many more youth grew up in small towns and naturally fell into hunting, fishing, and other outdoor sports and activities. However, with the advent of video games and computers, youth today are not as likely to pursue outdoor activities. This affects DNR's support base because the Agency depends on license revenues for traditional outdoor activities. The challenge becomes how the Department can become a more diverse agency, supporting the traditional agency goals while maintaining public support in this new world.

Funding for conservation activities has traditionally been based on consumptive activities. While this committee does not intend for its focus to be on funding, it is important to clarify that without youth interest in traditional outdoor activities, the future of conservation is precarious. Sportsmen are integral to habitat conservation and species protection. Fish and game management programs, which are funded by sportsmen's dollars, have enhanced both consumptive and non-consumptive recreational opportunities. Fish and wildlife management efforts and advocacy, funded and fueled by sportsmen, have conserved millions of acres of land, thereby providing vital habitat for both game and nongame wildlife.

The average hunter donates \$53 per year to conservation organizations; by comparison, the average U.S. resident donates \$32 per year. The most common organizations to which they belong or donate to are the National Rifle Association, the Nature Conservancy, local hunt or gun clubs, or a species-specific organization such as Ducks Unlimited, Quail Unlimited, or Pheasants Forever. Sportsmen also create revenue and support jobs. Hunters spend at least \$22.7 billion and \$42.2 billion, respectively, on hunting and fishing each year. It is estimated that hunters and anglers support 593,000 and 1,032,000 jobs, respectively (Responsive Management/National Shooting Sports Foundation). Annually, \$25 billion is collected in federal, state, and local tax revenues according to the Congressional Sportsman's Foundation "Hunting and Fishing: Bright Stars of the American Economy" report. Angling, a year round sport with local opportunities for most people, provides incredible opportunities for low cost expansion of outdoor recreational opportunity. Angling activity increases with income and reduced population density. This means that the lowest participation occurs in our poorest, most dense population centers. With Chicago immediately adjacent to Lake Michigan, our opportunity to expand outdoor recreation through angling is almost unlimited.

This committee goes beyond just the hunting and fishing sphere and tries to address what Richard Louv in his book *Last Child in the Woods* has coined, "nature deficit disorder." How can we best connect children with the outdoors? No one is born with a passion for fishing, shooting, and other outdoor activities. Children are born with a much simpler curiosity about nature, and experiences are increasingly unavailable to kids to foster that interest because more parents are working, more children are involved in other extracurricular activities, and many

folks were not exposed to outdoor experiences themselves and thus are naive about introducing nature activities to their children. There is a role for the agency to play in the initiative. Today's children are distracted with multimedia activities. The Agency wants to attract youth to DNR and its many outdoor activities.

III. Background

Overall, the number of Americans participating in outdoor recreation has increased to 50% in 2007, but there was an 11.6% decline in youth (age 6-17) participation in 2006 and 2007. Children are increasingly spending more time indoors or in structured sedentary activities. These trends are contributing to childhood obesity as well as increasing depression and attention deficit hyperactivity disorder. Young people who grow up without experiencing the outdoors and nature are less likely to be active participants and stewards of the environment as adults (Outdoor Recreation Participation Report 2008).

Among youth, the rate of participation in outdoor activities is higher than the rate for team sports and indoor fitness activities. A higher percentage of youth take part in outdoor activities at least twice a week but, 42% of youth participated in an outdoor activity 30 times a year or less. The favorite activities for youth aged 6-17 are bicycling, running/jogging/trail running, skateboarding, fishing, and camping (Outdoor Recreation Participation Report 2008).

Participation among boys and girls ages 6-12 dropped significantly from 2006-2007. In 2006, at the beginning of the survey, participation was nearly equal, at 79% for boys and 77% for girls. Girls' participation declined from 77% to 61% and boys fell from 79% to 72%. This exacerbates an already negative trend as females continue to drop out of outdoor sporting activities as they age (). Outdoor activities lose their appeal to females in their teen years and males in young adulthood. Youth tend to migrate from outdoor activities and team sports to indoor fitness as they age (Outdoor Recreation Participation Report 2008). A U.S. Fish and Wildlife Service (USFWS) study concluded that from 1995-2006, for youth aged 6-15, fishing declined 18%, hunting increased 3%, wildlife watching declined 22%, and overall participation in all outdoor activities declined 18%. The survey concluded that for children aged 6-19, outside recreation consisted of passive, close to home activities such as biking, listening to music, reading, and playing or hanging out. They concluded that males are most likely to spend four or more hours outdoors on weekdays. Males, especially those aged 16-19, are also more likely to spend four or more hours outdoors on weekends. Females are more likely to spend less than one hour outdoors, except for ages 6-9 (Betz).

Most youth are introduced to outdoor activities by parents, family, and friends. Few youth were motivated by media, mentors, or outdoor education programs. Fun is by far the most common motivation for participating in outdoor activities. Lack of interest is the primary reason for youth of all ages to not participate in outdoor activities. Lack of interest was followed by lack of time, competition from other responsibilities, and a preference for screen media activities (Outdoor Recreation Participation Report 2008). Other interests like videophilia outpace safety/environment and family or social reasons for not spending more time outdoors (Betz).

A survey conducted by Western Illinois University and IDNR in 2008 examined the demographics of adult respondents who participate in various outdoor activities including running/jogging, pleasure walking, picnicking, using a playground, fishing, cross-country skiing, ice skating, pool swimming, swimming, water skiing, motor boating, sailing, canoeing/kayaking, hiking, tent camping, vehicle camping, golfing, tennis, softball/baseball, outdoor basketball,

soccer, trail bicycling, road bicycling, horseback riding, snowmobiling, off-road vehicle, hunting, trapping, observing wildlife/bird watching, and in-line skating. Participation in most of these activities significantly increased when parents were participating with their children. Activities which did not show a statistically significant increase or decreased were cross-county skiing, motor boating, vehicle camping, horseback riding, trapping, and wildlife observation/bird watching. This indicates that adults who enjoy outdoor activities participate in them more frequently when the family is involved (2008 Illinois Outdoor Recreation Survey).

The report by Responsive Management and National Shooting Sports Foundation entitled, the Future of Hunting and Shooting Sports, identifies strategies to better meet the needs of current and potential outdoor recreation participants, and more effectively communicate to the public about these activities. The report reviewed surveys on national hunting and shooting trends and made recommendations on how to increase these trends. The report concluded that the number of active hunters has decreased in the U.S., and fewer youth are entering these sports. Conversely, an overwhelming majority of Americans support hunting. Support, but not participation, has been increasing during the past decade. Overall, 78% approve of hunting but there are fewer hunters in the field. The American public still believes that it is important for state fish and wildlife agencies to provide opportunities for recreational hunting and shooting.

Three demographic trends in particular have strong implications for participation in hunting: the trend toward increasing urbanization, the aging of the American population, and the declining proportion of the U.S. population that is white/Caucasian. All three of these trends run counter to an increase in hunting participation. Changing demographic factors in the U.S. are driving the trend of decreasing hunting participation. According to the U.S. Census Bureau, in 1950, 36% of the U.S. population lived in a rural area. This percentage decreased to 30% in 1960, 25% by 1990, and 22% in 2000. Hunting participation is positively correlated with rural living. To compound this factor hunter recruitment was down sharply among urban residents, relative to non-urban residents. Therefore, not only is the U.S. becoming more urban, but the urban demographic group is even less likely to hunt (Responsive Management/National Shooting Sports Foundation).

Another important demographic trend influencing hunting participation is an aging society. U.S. Census Bureau data indicate that the median age of Americans has increased from 28.0 years in 1970 to 36.4 years in 2006. Furthermore, the median age of white Americans, the demographic group most likely to hunt, was even older, at 39.0 years in 2006. The increasing age of the American population is especially detrimental to hunting participation because young adults are more likely to hunt than are older adults. There is a rapid decrease in hunting through the teenage years, followed by a steady decline after the age of 25 (Responsive Management/National Shooting Sports Foundation).

Hunting is typically a pursuit of rural white males. The large majority of hunters (86%) identify themselves as white/Caucasian. The large majority of hunters (77%) are male. Inactive hunters tend to be older than active hunters. Although only 10% of active hunters are 65 years old or older, 23% of inactive hunters are that age, reinforcing other findings that suggest that many inactive hunters have dropped out because of age or health (Responsive Management/National Shooting Sports Foundation).

Most hunters start hunting in childhood, with younger initiation correlated with greater avidity and retention. A majority (58%) had hunted at least once by the age of 12 years. Initiation needs to occur by the age of 20 to instill a long-term love of the sport. The majority

(67%) of hunters were initiated at age 20 or younger, and 18% of first-time hunters in 2006 were 10 years old or younger. Initiation into hunting is most commonly through male family members, particularly a father or stepfather, but also uncles, brothers, and grandfathers (Responsive Management/National Shooting Sports Foundation).

Other research has examined whether single-parent households have an effect on child hunting rates. The data shows that growing up in a single-parent household does not negatively affect child rates. Further, hunting participation by the female parent increased the likelihood of higher participation rates for both sons and daughters, compared to only male parental participation. If a male parent hunted 10-19 days, the participation rate for sons (46%) and daughters (13%) was considerably less than if a female parent hunted 10-19 days; in that case, 64% of sons and an estimated 50% of daughters participated (Responsive Management/National Shooting Sports Foundation).

Hunters initiated when they are young with family support hunt more often and are more likely to be avid hunters throughout their life compared to hunters initiated in another way. The presence of other family members who hunt, the exposure to hunting, and the presence of the hunting culture are of utmost importance in hunting initiation (as well as continuation). Rarely does hunting initiation occur outside of these parameters. Hunters come from hunting families, and hunting families produce hunters. Mentoring plays an important role in hunting initiation (Responsive Management/National Shooting Sports Foundation).

Family introduction to the sport is important before young hunters enroll in education classes. Intense education courses are intimidating and time consuming. Being in a hunting culture—such as having friends and family who hunt or at the very least approve of and support hunting—is vital in hunting recruitment, where experienced hunters help initiate new people into hunting. It is easier to recruit a person into hunting who is familiar with hunting and is part of a hunting culture than it is to recruit a person from outside of the hunting culture (Responsive Management/National Shooting Sports Foundation).

Motivations for hunting have shifted significantly from sustenance to recreation. Many of the top factors for hunting dissatisfaction are beyond the control of wildlife agencies, including hunters' health and age, time obligations because of family and/or work, and loss of interest. Nonetheless, there are some factors over which agencies have some control, the most important being access, behavior of other hunters, and adequate game populations (Responsive Management/National Shooting Sports Foundation).

Hunting and sport shooting participation are declining as the result of an increasingly urban and aging society, lack of nearby quality hunting or shooting opportunities, lack of awareness and access to those opportunities, and lack of coordination and use of the best available research to guide hunting and sport shooting recruitment and retention programs, and a lack of sufficient financial resources for the administration of such programs (Responsive Management/National Shooting Sports Foundation).

IV. Findings - Current Programs

The Department of Natural Resources offers many activities and programs for youth in the divisions of the Fisheries; Land Management; Mines and Minerals; Special Events, Programs, and Promotions; State Museum; and Education. The Division of Fisheries offers the Urban Fishing Program which coordinates summer and special fishing clinics, school programs, rod and reel loaner sites, fish stockings, and other programs. Last year, over 21,000 youth

attended a fishing clinic. Additionally, volunteer organizations held over 300 fishing clinics for more than 8,700 youth. The *Hooked on Fishing-Not on Drugs Program* is a national program that combines angling skills, fishing, and ethical care of the environment and it hooked 27,500 kids in Illinois last year. The *Access to Fishing* rod and reel loaner program has loaned materials more than 9,000 times since 1997 and is currently offered at 102 sites. The Division of Fisheries also provides fishing literature including *Knot Tying*, *Kinds of Fish*, fishing regulations, *Kids Fishing Safety*, how to teach kids to fish, and other youth fishing publications. They also assist with the *Illinois High School Association Youth Bass Fishing Regional and State Final Tournament* which included 220 schools in 2009, and expects 350 schools next year. Fisheries is also involved in the *BASS Federation annual statewide tournament* and the *Illinois Muskie Tournament Trail*, which includes 2-3 youth tournaments. Fisheries also provides assistance to numerous general requests including fish hatchery tours, county conservation field days, *Envirothon* programs, park days, general school programs, state/county fairs, YMCA programs, girl scouts/boy scouts, forest preserve districts, Arbor Day, Clean Water Celebration, and many others as requested.

The Division of Land Management oversees Illinois' State Parks. Their interpretive programs provide programming to thousands of youth each year. Interpreters provide school group programs on-site and in the classroom. Frequently, interpreters will go to the classroom first and provide a presentation and then have a hands-on program at the park with the class. Interpreters work with scout groups, 4-H and other youth environmental organizations providing programs, as well as leading activities associated with badge requirements and certifications. Interpreters coordinate special youth events such as Earth Day celebrations, It's Our River Day Celebrations, Wingshooting clinics, Fishing clinics, Archery Shoots, Conservation Days, etc. Interpreters provide programming within their visitor centers for general park visitors. Much of this programming is in conjunction with educational exhibits at the visitor centers. Interpreters also offer programs within their park campgrounds for families and youth. Seasonal campground program topics vary depending on the time of year, current happenings in nature, state or national events, historical happenings, etc. Interpreters work with constituent groups and provide programming for their youth programs such as JAKES events (National Wild Turkey Federation), and Kids on Target (Whitetails). Interpreters assist with statewide educational and recreational programming coordinated through the Land Management office in Springfield. These include Wilderness Camping, Becoming an Outdoor Woman, Women in the Outdoors, Seasonal Interpreter Trainings, and State Fair youth activities.

The Office of Mines and Minerals (OMM) public programs are mostly aimed at public participation in the regulatory process. However the *Rock Box* is a travelling educational display on Illinois' mineral resources and their uses. OMM staff travel to 30-40 events and schools per year to give *Rock Box* presentations. OMM staff educate teachers on mining in Illinois annually at the Department of Commerce and Economic Opportunity's Rend Lake conference, and offer occasional school field trips to blast sites, and educate students on explosives safety.

The Office of Special Events, Programs and Promotions offers many educational programs aimed at the shooting and hunting sports. The Outdoor Recreation and Recruitment Section (Shooting Sports Development) offers the Intro to Wingshooting Program for Youth and Women; Scholastic Clay Target Program, a competitive shotgun shooting in the disciplines of trap, skeet, and sporting clays for youth; the National Archery in the Schools Program introduces archery in the public, private, parochial, and academy school systems; Youth Archery Clinics for churches, scouts, agriculture extension offices, and camps; Youth Waterfowl Hunts; Youth Dove Hunts; Youth Pheasant Hunts; Youth Deer Seasons; Youth Turkey Seasons;

Disabled Youth Hunts for deer and turkey; Archery and BB Gun tents at State Fairs; Shotgun ranges at National Hunting and Fishing Days events; and other outreach programs. Mandatory Safety Education Programs include hunting for anyone born on or after January 1, 1980, boating for ages 10-17; snowmobile for ages 10-15; and trapping for any first time participants under the age of 18. These safety classes are also promoted and open to all ages. These safety courses are run by the DNR, but volunteers and organizations such as Pheasants Forever and Quail Forever chapters operate them locally. Courses are sometimes offered women only as women represent the only hunting contingent that is growing.

The Illinois State Museum (ISM) has six locations in which youth programs are introduced: ISM's public museum building; Research and Collections Center in Springfield; Dickson Mounds Museum; Chicago Gallery; Lockport Gallery; and Rend Lake. The Museum offers an amazing number and diversity of educational programs for youth. These programs are grounded in the Museum's original research, extensive collections, and thought-provoking exhibitions about the natural and cultural diversity and heritage of Illinois. Family Learning exhibition guides are created in-house for specific exhibitions to encourage families to explore on their own selected objects in depth. The *Changes* natural history exhibition has numerous hands-on elements geared to youth, and *Changes Checklists* are available for self-guided activities. Self-guided tours and orientations during the Museum's busiest time for school tours in April and May reach approximately 45,000 children, grades K-8 each year. School programs on natural sciences, anthropology, history, and art in the ISM's galleries and exhibitions (*Changes*, *Peoples of the Past*, and *At Home in the Heartland*) are taught by an educator and correlated to the State Learning Standards (Grades Pre-K through High School). Independent activities and pre/post visit teacher packets are also offered for the exhibitions. Annual overnight camp-ins (public and "Boys and Girls Club") are held for children ages 8-11. Quarterly Family Events are held, which reach approximately 500-700 visitors per event. Annual Halloween events with numerous educational activities for all ages draw approximately 1,800 people. Super Saturday events are recommended for ages 4-8 and attended by approximately 200-300 each month. The *Museum Tech Academy* after-school and summer program in natural sciences and archaeology reaches approximately 45 students grades 7-9 each year. The Junior Collector's Day is held for ages 8-15 attracting approximately 20 collectors and hundreds of visitors. Summer Science workshops reach approximately 30 children grades 1-4 annually. Summer Art workshops reach approximately 45 children in grades K-8 annually. Summer Film Festivals shown four times weekly in June and July are recommended for ages 3-8 and attended by approximately 2,100 people annually. Summer programs for the Boys and Girls Club are attended by approximately 120 children grades K-8 annually. *A Place for Discovery* is a hands-on gallery for children ages 3-10. Curator and educator-led behind the scenes programs and tours in the Research and Collections Center are offered for schools and other groups (grades 5-12 and college). A variety of online educational resources for Pre K-12 teachers and students are on the Museum's Web site (www.museum.state.il.us).

The Division of Education offers many Natural Resources-Related Educational Materials. Items are produced using the Illinois Learning Standards and Illinois Early Learning Standards as their foundation. All items are distributed free of charge to teachers at ISBE-registered schools in Illinois. Spanish-language versions of many items are available. The *ENTICE (Environment and Nature Training Institute for Conservation Education)* program offers teacher-training workshops about Illinois' natural resources. In cooperation with the University of Illinois Urbana-Champaign and Springfield campuses, five online graduate-level courses are offered with the goal of providing a teaching endorsement in environmental education. The *Illinois Biodiversity Field Trip Grant Program* is a competitive grant program allowing teachers to apply for up to \$500 to take students on a field trip to an Illinois location to

study some aspect of Illinois' natural or cultural biodiversity. All funds for this program are donated. The *Schoolyard Habitat Action Grant Program* is a competitive grant fund allowing teachers and other educators to apply for up to \$600 to create or enhance wildlife habitat on the school grounds or other public sites. All funds for this program are donated. The Agency has items for loan in a series of resource trunks that are available from locations across the state. CD-ROMs are also available from lending sites. The *Federal Junior Duck Stamp Design Contest* is an annual educational program and art contest, which highlights wetland and waterfowl conservation and is open to all Illinois students of grades K-12. At *Earth Day in the Parks* students participate in natural resources stewardship activities at Illinois state parks and are encouraged to return to the park to observe and study the results of their efforts. Cooperation with community college horticulture programs to raise native plants for the event is occurring. Through the DNR List Server, educators can learn about upcoming workshops, events, new educational materials and other items of interest. An Online Ordering System allows educators and the general public access to DNR publications. At the *Illinois Biodiversity Studies* through the *iCollaboratory Project* students collect data about spiders and squirrels, interact with scientists, analyze results and hold discussions with other participating students. The interactive student Web pages offer another educational option, providing information to students and the general public.

In addition to the programs offered at DNR, the Youth Recruitment and Retention subcommittee discussed regional and statewide activities offered by local organizations as they traveled. Each location afforded a view of unique partnerships and ideas to maximize impact on children in these areas.

Statewide

The Pheasants Forever (PF) and Quail Forever (QF) youth programs are focused on sparking interest in the outdoors, sharing skills, providing access, providing opportunity, providing experience to recruit youth and to train good hunters and conservationists for tomorrow. The umbrella program of PF and QF is called No Child Left Indoors and is focused on addressing the issue of youth spending more time inside. The program is comprehensive, working with local chapters and members as well as communities and organizations who want to enhance and build on PF and QF programs and provide more opportunities for children and their families. Nationally, PF has hosted 500 youth events, impacting about 2500 kids over the last few years. Illinois has about 30-40 events, which reach about 3000-5000 kids each year.

Once youth participate in a hunting safety course offered by DNR, it is essential to get them involved in the activity as soon as possible. PF and QF Youth Mentor Hunt program is growing quickly in the nation. The program is scattered throughout Illinois, but a more cohesive effort should be made to implement the program statewide. In other states like Minnesota, programs are in effect to open private lands for youth hunts. This provides a continued opportunity for youth to get involved and participate in more frequent hunts. Consistent access to land for outdoor activities is a continual barrier to these activities.

PF and QF offer many more activities and programs targeted at youth. Youth Conservation Day offers children an opportunity to try various conservation activities including mock hunts, boating, fishing, photography, and more. Most chapters provide a youth membership. Conservation Camps in other states are partnerships between the DNR and PF that offer mentors for two day activities and youth learn the same things offered in the Conservation Days and get a chance to hunt in the field. Illinois PF now has a Youth Programs Coordinator in Chicago to provide assistance to our chapters for youth events and promotions.

The Illinois Youth Leadership Council, established this month, will consist of 6-8 youth ages 10-18 and they will be involved in the decision-making process of PF. The Aldo Leopold Education Project is a teaching teachers' program. Workshops for teachers give them tools to teach the Leopold land ethic in classrooms. The Youth Village at Pheasant Fest offers youth opportunities to learn about hunting and conservation practices. A partnership with the Future Farmer of America (FFA) offers chapters funds for youth to identify and build conservation areas in their communities, including school yards.

The National Wild Turkey Federation's (NWTF) JAKES (Juniors Acquiring Knowledge, Ethics, and Sportsmanship) is dedicated to informing, educating, and involving America's youth in wildlife conservation and the wise stewardship of our natural resources. Extreme JAKES is targeted toward older teenagers. JAKES events are usually a round robin type schedule, where participants are exposed to several activities in one day. Other types of events include festivals and fairs, educational presentations and hunts. Mentored youth hunts pair interested youths and parents with experienced hunters and mentors. Learn to hunt events take the entire weekend to educate kids on the hunter safety and end in an actual hunting opportunity. Other conservation opportunities include stewardship projects like stream clean ups and partnerships with Boy Scouts and FFA. Reaching and inviting interested youth is the largest barrier, informing the interested families of the activities will get more youth involved. For more information about JAKES visit <http://www.nwtf.org/jakes/>.

NWTF offers several other programs for youth. All local chapters offer scholarships to graduating senior high school students, and state and national winners are selected from that pool of candidates. The Illinois state chapter also offers post high school scholarships to students pursuing conservation related careers at Illinois universities and colleges. NWTF partners with DNR for the National Archery in the Schools Program to get equipment for participating schools. A conservation education curriculum is offered in turkey transport boxes for teachers. Additional education resources are offered for science classes, and they meet national education standards. Many resources and training events are offered for educators. A national grant is given each year for the conservation educator of the year.

Northern Illinois

In Rockford, every year, the Rockford Park District surveys 500 residents on their interests. Approximately six years ago, environmental and green programs were in the 50-60 percentile ratings, but now 90% of the respondents want the park district to continue offering outdoor environmental education programs for youth. 85% are interested in community beautification and conservation; 85% agreed the park district helps the community reduce crime through outreach and environmental education efforts; 82% feel positive about the park district participating in environmental initiatives through alternative energy use, reducing pesticide use, and recycling. The District is making major headway because the community supports its efforts. For the survey results visit <http://www.dnr.state.il.us/NRAB/children/20090813144002013.pdf>.

The Northern Illinois Sierra Club's *Building Bridges to the Outdoors* national program operates in six states and offers activities for underserved youth to get outdoors and experience nature. Service education and exploration in nature are the foci, but it incorporates work on policy that will help get kids outdoors. In Illinois, the primary partners are the Boys and Girls Clubs of Chicago. The program has supported them for five years beginning with annual trips for about 70 youth to the Indiana Dunes National Lakeshore for a weekend of outdoor experiences and leadership training. This year they are expanding the program to take members

of the local Boys and Girls Club of Chicago to the Cook County Forest Preserve a minimum of four times per year to engage in ecological stewardship and exploration.

Chicago Area

The Chicago Botanic Garden has been working with a group of nonprofits that serve the teenage Chicago audience. Teen activities focus on using alternative methods to teach environmentalism and conservation. The Science First program is held four weeks in the summer and includes students from north and south Chicago. They participate in science activities using the Garden as a living laboratory. The program ends with an environmental science research project. Lake County Forest Preserve is replicating the program with the Garden.

The Garden's College First program introduces underserved Chicago Public School students to science and helps them enter science careers. It is an eight week summer program plus once a month during the school year to keep them engaged. The program has two components, a classroom component that teaches science and a field component where the students learn with a mentor in the Garden. The students provide skilled assistance to their mentors in the Gardens. A reported 95% of the students who participate in the program go on to college.

The Garden's Green Youth Farm serves North Chicago and Chicago underserved schools. The Garden teaches students how to farm. It connects students to the environment through the food they eat. Participants are taught organic farming, community development, social entrepreneurship, and development of products such as beeswax candles.

The Garden's Fairchild Challenge is for high school students and incorporates activities they are already interested in but adds an environmental twist. A total of 3,500 students at 50 different high schools participate. Schools earn points for participating and students can earn prizes. The program is transportable and can be implemented at a state level, but is only available in the Chicago area. Contest categories change each year, but some examples include graphic design, t-shirt design, photography, urban planning, photo montage, poetry, music, satire, cartooning, green business, journalism, and sustainable eating. The student that earns the most points overall is awarded an eco-expedition trip with EarthWatch Institute.

Metro East

The National Great Rivers Research and Education Center (NGRREC), headquartered in Godfrey, has three primary partners: University of Illinois, Illinois Natural History Survey, and Lewis and Clark Community College (LCCC). The mission is research, education, and outreach related to large rivers, floodplains, watershed, and communities. They have many other partners in the environmental education arena. The Great Rivers Land Trust and the Jersey County Job Center partnered to form a Conservation Corps of local students. The NGRREC took students to the Palisades Reserve for invasive species removal and plant identification at different land trust properties. A partnership with the U.S. Army Corps of Engineers (USACE) at the St. Louis Science Center attracted 14,000 people to an event where NGRREC displayed an active rain barrel that children could operate and see water cycling through the model. The event also included a native plant display and NGRREC taught children about river issues, showed them native fish and how to manage and identify healthy versus unhealthy ecosystems. At another program, 1,000 fifth graders participated in the annual Water Stewardship Festival and enjoyed fishing clinics and rides on DNR's voyager canoe. Before the event, a Project Wet

teacher's workshop was held. Project Wet is an educational resource for instructors to get students interested in aquatic ecosystems. As part of the College for Kids program with LCCC, students get an opportunity to do aquatic invertebrate sampling and learn about local aquatic health related to RiverWatch, a citizen scientist water quality monitoring program. An NGRREC internship program for college students gives them research experience on river systems. NGRREC manages several pieces of property which can serve as outdoor classrooms for environmental education. They include areas around the LCCC campus, the Palisades reserve, and other properties. In addition to the educational resources and programs offered by NGRREC, land that NGRREC manages can serve as host sites for outdoor youth activities.

Community Cultivators in the Metro East operates a one acre children's garden in LaVista Park that is a Forest Legacy Preserve. Within DNR's Forestry Preserve, the Village of Godfrey and other educators, have developed an outdoor education program. Every aspect of the design is contiguous with the land preservation while educating children. They have at least three classes that come out and do three hour programs learning about where their food comes from and how they can work in nature with natural cycles in order to produce a sustainable crop. This successful program gets at least 1,200 student participants each year. This year the program is preparing an Illinois Standards curriculum on organic gardening as part of a \$10,000 grant.

The Mississippi River Earthtones Festival in Alton is an It's Our River Day celebration that encompasses projects focused on education, recreation, and conservation. This year, river clean up volunteers will be at Piasa Harbor working with the Illinois Natural History Survey and the USACE to clean up the area. The actual festival will have at least 30 hands on educational booths for children on green lifestyles and businesses.

The region also has a small grant this year to plant 2,010 trees by Earth Day 2010 at the Two Rivers National Wildlife Refuge. High school and middle school youth volunteers will plant the trees, which will be obtained from a sustainable grower and planted at the site in Calhoun County. The trees will improve floodplain habitat within the refuge.

Alton private and public schools and the City will be addressing the local litter problem through the *Litterature Program*. The program addresses the societal aspect of littering. A kit goes to every school that participates and includes two books, or a book and a video that deal with the environmental issue of littering and how young people are stewards of their environment.

The Upper Mississippi River High School Education curriculum gives information to teachers on the third largest watershed in the world. An informational DVD gives students a history of the uses of the river, its ecology, and human interactions. Students are put in groups and assigned real life problems to develop creative and unique answers. Their solutions are available to anyone who is interested.

V. Recommendations

The committee recommends:

- Educate, in schools and through informal programs, youth on conservation issues and natural resources.
- Market, promote, and advertise existing programs and activities.
- Develop, with non-government partners, a mentoring program that will pass on the hunting and outdoor traditions.

- Improve access to land, activities, people, and resources that offer recreational and educational opportunities for youth.

The committee feels that action toward these four goals will accomplish the stated mission of increasing youth participation in outdoor activities. During the committee's tour, many methods to accomplish those three recommendations were introduced and discussed. Listed below are specific strategies put forward by the public during the meetings and are included here to help the Department, the State, and the Public implement the recommendations. Education items aim to increase knowledge and awareness of conservation issues and outdoor opportunities within existing educational systems. Marketing and promotion strategies aim to increase the visibility of the agency, especially its family and youth programs. The mentoring program will develop a network of volunteers, educators, and professionals that will be available to the public to teach outdoor and conservation skills to families and youth. Access objectives aim to increase the availability of land and other resources for youth activities and experiences in the fields of hunting, fishing, hiking, camping, wildlife viewing, and other recreation activities. Recommendations within the public access goal are further sorted into consumptive (e.g. hunting and fishing), non-consumptive (e.g. hiking, wildlife viewing, and other recreational activities), and urban area objectives.

Education

- With over 16 miles of shoreline in Chicago, and an increased interest in fishing for sustenance. The northeastern and Northwestern Illinois (regions 1 and 2) urban fishing coordinators positions have been vacant for several years and should be filled.
- All regions should have at least 1 dedicated Urban Fishing Coordinator.
- DNR's hunting programs should incorporate other educational information on native prairies and other native wildlife habitats.
- Encourage and promote family participation into hunting, safety, and other programs. Family experience and support is vital to the ultimate success of these programs.
- Outdoors education should be taught in the classroom.
- Create an educational program that introduces children and families to camping and encourage them to use the State Parks for this activity. Provide funding or a loan program to assist families in paying for camping equipment.
- Hunter and angler groups should participate in the educational events and would like DNR to help them communicate and work with those constituent groups.
- Conservationists have historically fallen into two user groups: consumptive versus non-consumptive. There has been a schism between the groups, preventing them from effectively making progress on shared goals. This schism is something the DNR should address at the Congress, specifically how DNR can serve as a platform for dialogue between both user groups.
- Incorporating educational materials and messages into sponsored recreational activities will develop appreciation for the experience.

- Increasing grants to schools and teachers to develop schoolyard natural environments and create outdoor laboratories would be very beneficial to childhood education. Provide staff and materials to assist teachers and schools in accomplishing this. Funds and recognition should be given to schools that maintain natural grounds for education; too often these programs fail after several years because the will to maintain the natural areas declines over time.
- Focus on program access for under-served demographics. DNR should identify ways to meet these constituents in their communities and work with their leaders in a sustained and long term way.
- Expand DNR's ENTICE program to reach more teachers in the metropolitan and Chicago areas.
- DNR should host at least 1 teacher workshop each year devoted to outdoor education. These two day workshops should be available at no cost to the teachers and should be certified as continuing education through a cooperating public University.
- Work with NGOs to get aquatic ecology and fish/fishing activities in the classroom such as Trout Unlimited Trout in the Classroom program.

Marketing and Promotion

- DNR must publicize and market currently existing programs to maximize outreach. Use online calendars that are already available such as Gatherings Online by The Nature Conservancy.
- DNR should target toddlers and pre-K children by working and offering programs at preschools to foster an appreciation of the outdoors at an early age. Possibly develop series trunks for preschools
- DNR should involve more parents in family-oriented programs to retain youth involvement, especially young and single parents who are less likely to be involved in outdoor recreation.
- The State should audit youth engagement programs across agencies, looking for gaps and ways to improve effectiveness through better coordination.
- Create an optional stamp program to accompany other mandatory stamps like hiking and bird watching to generate revenue for the State Parks.
- Providing information in school newsletters can get the message out to more families and students about educational and conservation activities.
- DNR and NGOs should attend teacher conferences to get the word out to educators about programs.
- Create a marketing campaign that makes the outdoors "sexy."

- A marketing campaign could recruit new hunters and help dispel gun fears. Showing people how to save money on food through hunting can foster more interest in the sport.
- Increase awareness of recruitment and retention programs targeting outdoor recreationists who do not already hunt.
- DNR should launch with schools a formal “leave no child inside” campaign.
- Use technology and online networking to broaden DNR’s reach – (1) promote programs online (2) link with other groups with the same goals.
- Balance efforts to promote hunting and fishing with those to promote other uses of the state’s natural resources, and couple this with finding ways for a broader community input to provide financial support to the agency.
- Mobilize youth and parents to participate in local ecotourism, with more organized activities close to urban areas.

Mentoring program

- DNR should increase funds, staff, and volunteers throughout the state to meet the demand for conservation education and activities. Many schools and teachers want to educate children on outdoor activities, but resources and staff are needed to assist them.
- Certify mentors on certain outdoor skills and provide their contact information to the public.
- Assemble a volunteer corps ready to share their passion for the outdoors that can run programs at DNR sites and visit classrooms. Research Senior Corps and RSVP senior volunteer assistance groups (via the Corporation for National and Community Service).
- DNR should use more volunteers for program outreach.

Public access

Consumptive

- Enable the simplest activities for beginning hunters.
- Intensive hunting education courses can be overwhelming for novice hunters. DNR should facilitate initiation with basic courses instead of mandating intensive courses.
- DNR should coordinate more youth hunts.
- Youth safety courses alone do not retain youth interest; instead, safety courses followed with group hunts increase future participation.

- CREP funds allow farmers to take land out of production and use it for habitat conservation and hunting. Pursue creating incentives to farmers if land is opened to youth hunting.
- Foster the natural path to hunting, which begins at a young age when mentors take youth hunting.
- There should be a landowner sign up for individuals to allow youth to hunt on private property.
- Hunting seasons are too long; regular seasons should be shortened, and longer youth seasons should be implemented.
- Reduce complexity for youth hunting tags and licenses.
- Incentives should be given to landowners who allow youth to hunt on their property.
- Improve access for hunting and shooting opportunities for youth.
- DNR's access programs should not just focus on hunting and shooting, but also teaching kids through hands on habitat restoration and stewardship.
- Create youth targeted angling opportunity at State owned sites. Kids only fishing ponds can start young anglers out in a positive, safe environment. Parental supervision gets the entire family involved. Advertising and Department participation will result in increased outdoor recreation both within and outside of the children only opportunity zone.

Non-consumptive

- DNR should create partnerships with Ducks Unlimited and other organizations to facilitate programs. The Capital Bill includes funds for recreational facilities and DNR should focus that money on projects that will encourage youth involvement.

Urban area

- DNR could offer incentives to allow hunters to cull deer at county forest preserves surrounding urban areas, while temporarily closing the preserve to the general public. The public would pay for the opportunity to hunt in forest preserves, and hunting opportunities could be limited to hunters who mentor youth.
- Re-institute a Public Lakes or Community Lakes construction program in Illinois. New local public lakes increase low cost opportunity and green space, and can be teamed up with local mentors, instructional clinic, and tackle loan program.
- Expand the Urban Fishing Program to additional urban areas.
- DNR should co-host at least one family fishing event or fishing expo in an urban area of each Region annually. These events provide a full day of outdoor recreation, lots of education, and great family oriented atmosphere.

VI. Citations

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