

# ***Fishing for the Future***

## ***A Plan for Angler Recruitment and Retention in Missouri***



*Conservation makes Missouri a great place to hunt and fish!*

# ***Fishing for the Future***

## ***A Plan for Angler Recruitment and Retention in Missouri***

Prepared by the Angler Recruitment and Retention Committee

Jake Allman (MDC Fisheries)  
Kevin Badgley (MDC Outreach and Education)  
Andrew Branson (MDC Fisheries)  
Sherry Gao (MDC Resource Science)  
Norman Leppo (Missouri Citizen)  
Bob Mattucks (MDC Fisheries)  
Salvador Mondragon (MDC Fisheries)  
Denise Otto (MDC Fisheries)  
Royal Peterson (Missouri Citizen)

Ron Reitz (MDC Resource Science)  
Briedi Scott (MDC Outreach and Education (O&E))  
Mary Scott (MDC Fisheries)  
Casey Simmons (MDC Protection)  
Win Stevens (Missouri Citizen)  
Robert Temper (Missouri Citizen)  
Scott Williams (MDC Fisheries)  
Dave Woods (MDC Fisheries)

On behalf of the

Missouri Department of Conservation



2013

Approved by:

  
\_\_\_\_\_  
Robert L. Ziehmer, Director      Date

  
\_\_\_\_\_  
Tom A. Draper, Deputy Director      Date

# TABLE OF CONTENTS

<b><u>INTRODUCTION</u></b> -----	1
<b><u>APPROACH TO ANGLER RECRUITMENT AND RETENTION IN MISSOURI</u></b> -----	6
<b><u>STRATEGIES</u></b> -----	8
<b><u>GOALS</u></b>	
<b><u>INTRODUCTION AND RECRUITMENT OF YOUTH ANGLERS TO ANGLING (ELEMENTARY THROUGH HIGH SCHOOL)</u></b> -----	9
<b><u>RECRUITMENT OF FAMILIES INTO ANGLING</u></b> -----	10
<b><u>MODIFYING PERMITTING FOR CONVENIENCE AND DIVERSE OPPORTUNITIES FOR ALL TYPES OF ANGLERS</u></b> -----	10
<b><u>RETENTION OF EXISTING ANGLERS</u></b> -----	11
<b><u>ACTION PLANS</u></b>	
<b><u>ACTION PLAN SUMMARY</u></b> -----	12
<b><u>IMPLEMENT A DISCOVER NATURE-FISHING ANGLER EDUCATION PROGRAM FOR FAMILIES</u></b> -----	14
<b><u>IMPLEMENT A DISCOVER NATURE-FISHING ANGLER EDUCATION PROGRAM FOR SCHOOLS/YOUTH GROUPS</u></b> -----	17
<b><u>SUPPORT HIGH SCHOOL ANGLING PROGRAM</u></b> -----	20
<b><u>IDENTIFY AND INCREASE FISHING LOCATIONS FOR ANGLER EDUCATION</u></b> -----	22
<b><u>STRENGTHEN/EXPAND ROD AND REEL LOANER PROGRAM</u></b> -----	27
<b><u>DEVELOP SMARTPHONE CAPABILITIES</u></b> -----	29
<b><u>IMPLEMENTATION SCHEDULE</u></b> -----	31
<b><u>PERMIT RECOMMENDATIONS</u></b> -----	35
<b><u>LITERATURE CITED</u></b> -----	36

## Introduction

Missouri is blessed with wonderful water resources and fishing opportunities. From large reservoirs to private ponds; from big rivers to small spring-fed streams, Missouri's fishing heritage runs deep. Fishing continues to be a popular activity for the American people in general. Fourteen percent of the national population 16 years of age and older fished in 2011, and according to the U.S. Fish & Wildlife Service (USFWS) report "2011 National Survey of Fishing..." Missouri is located in the region that has the highest participation rates of fishing in the nation (Figure 1).

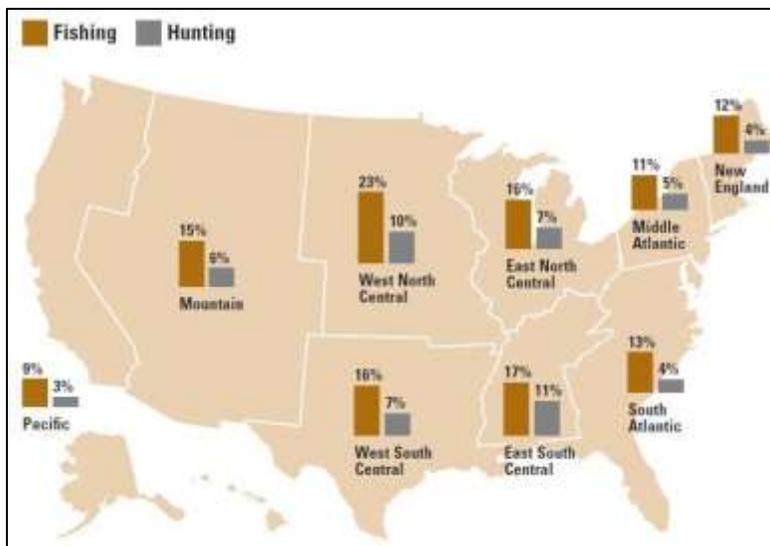


Figure 1. Participation Rates for Fishing and Hunting, 2011.

The number of anglers across the country in 2011 was almost 3% less than 10 years before, but during the last five of those years the number of anglers increased 11% (USFWS 2011; Figure 2).

While the number of Missouri anglers has fluctuated over the past 10 years, the number has decreased since 2001. According to the USFWS, Missouri resident and nonresident anglers totaled 1,071,000 in 2011. This is down 12% from the 1,215,000 anglers in 2001 and down 4.4% when compared to the 10 year average of 1,121,000 (USFWS 2011; Figure 3).

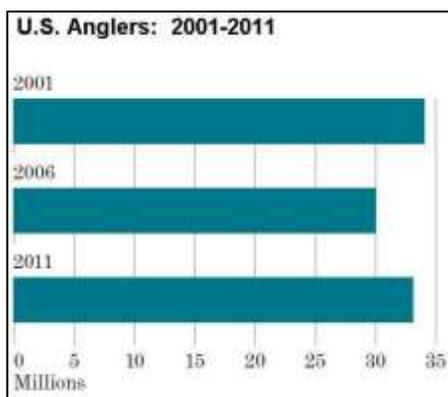


Figure 2. Number of Anglers in the U.S.

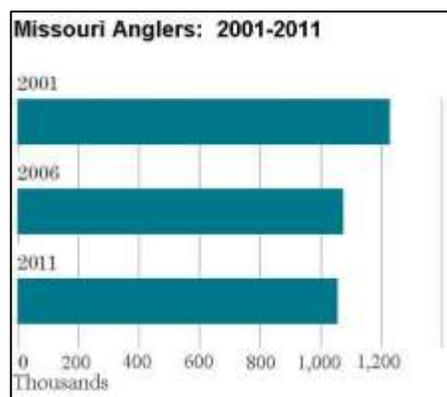


Figure 3. Number of Anglers in Missouri

A history of Missouri point-of-sale (POS) data shows that over the last 20 years fishing permit sales in Missouri have averaged 515,119. Resident fishing permit sales in 2011 were 477,867. This is 37,252 permits less than the 20-year average which equals about a 7% decline. In those same 20 years, the Missouri population has increased 17.2% (2010 census). The 2012 data show the number of Missouri resident fishing permits sold was 516,182 and, while this is an increase of 7% from 2011, it is still below the highs in years past (Figure 4). This increase over 2011 is encouraging, but it is unknown if this increase is the beginning of a trend. We must take proactive steps to build a strong fishing future for Missouri.

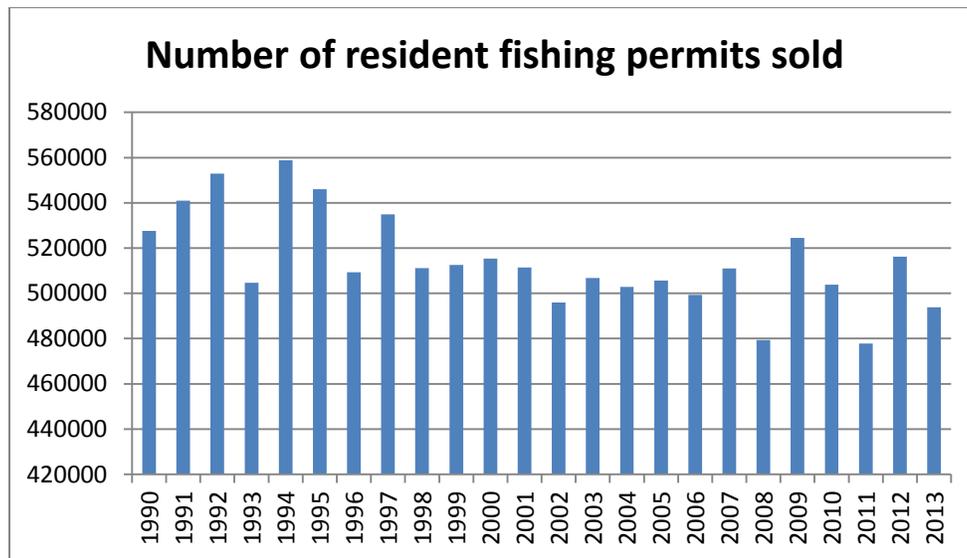


Figure 4. Resident Fishing Permits Sold in Missouri.

Nonresident fishing permit sales over the past ten years have followed a similar trend to the resident permits, but to a lesser degree. The number of 2012 nonresident fishing permits was 48,030, a 6.5% increase from 2011 (Figure 5).

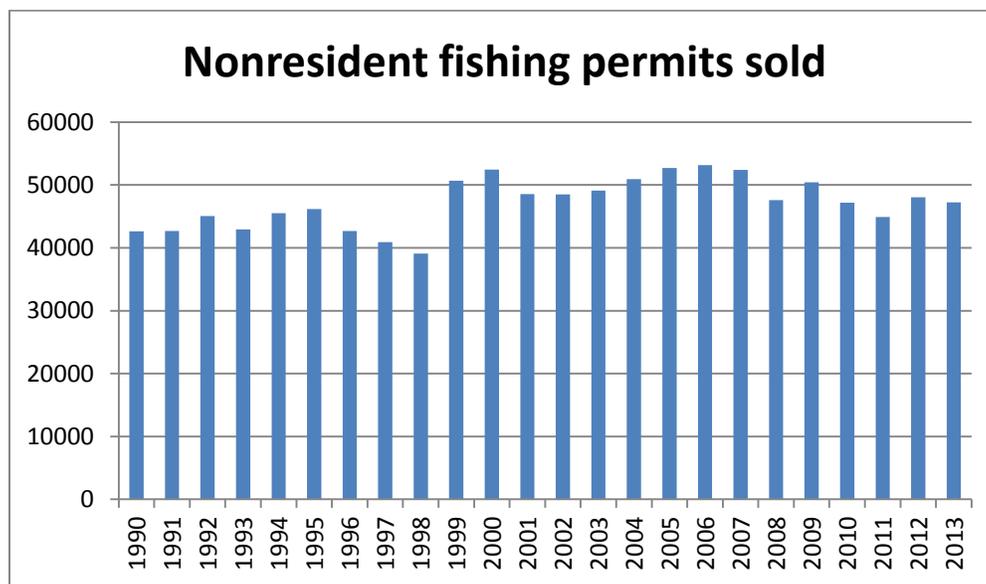


Figure 5. Nonresident Fishing Permits Sold in Missouri.

In the USFWS survey, participants are telephoned at random and interviewed about their fishing activity over the past year. Participants may be of any age, and they are not asked about permit buying, only about actual fishing activity. The USFWS survey includes those who have fished legally without a permit, such as persons younger than 16 or older than 64, those who have fished exclusively on their own property, or those who fished only on Free Fishing Days. It even includes those who fished illegally without a permit. While widely regarded as a highly reliable, valid survey, the USFWS study includes participant-remembered and self-reported information. Thus, it is not surprising that the USFWS survey suggests a much higher per capita angler participation rate than that calculated using permit sales data alone. POS data tell us very precisely and reliably how many people purchased a fishing permit. On the other hand, they do not tell us whether someone actually fished in a given permit year. Furthermore, dividing permit sales numbers by total population results in an underestimate of angler participation. A much more accurate rate would require a count of Missourians between 16 and 64 years old. According to the state of Missouri census website, people between the ages of 18-64 made up approximately 62.2% of the population in 2011 in a total population of 6,010,688. Therefore, Missouri has about 3,738,647 people between 18-64 years of age, giving us a 13% overall participation rate.

## Why are People Fishing Less?

### “Not enough time”.

According to an American Sportfishing Association and Southwick Associates 2012 study on why anglers do and do not fish and what will get them fishing again, “not enough time” is frequently cited as the primary reason for fishing less or not at all (Figure 6). The truth more often than not is that people are simply choosing other ways to spend their time. Fishing competes with many other activities for the time of individuals and families. These other activities provide greater perceived benefits or deliver desired benefits with greater convenience. Health and age were cited among ex-anglers and lapsed anglers as primary barriers as well. This illustrates the importance of recruiting new anglers and making angling convenient for older anglers.

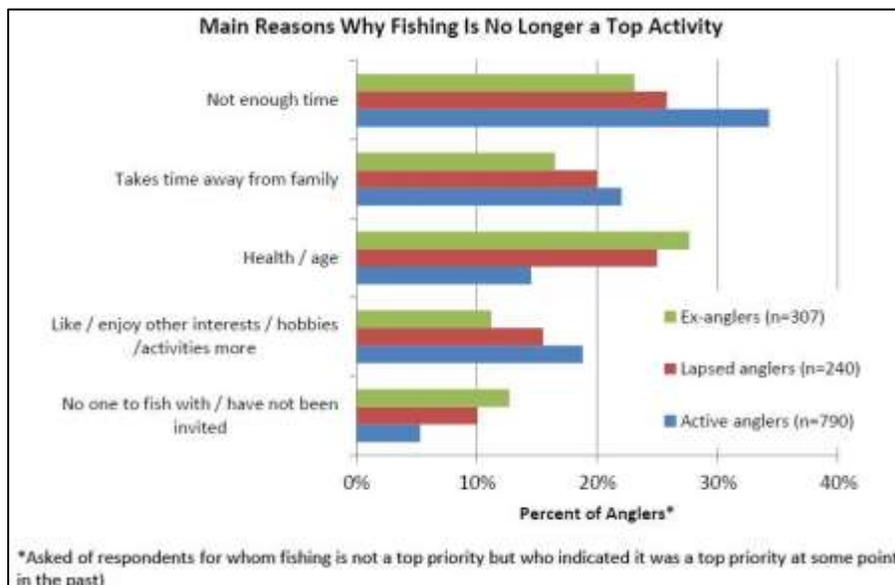


Figure 6. Why Fishing is No Longer a Top Activity in the U.S.

### “Lack of interest” and “not enough time” cited by youth.

The youth of today express a “lack of interest” in the outdoors as a major reason for not participating in outdoor activities. Nationwide, almost 30% of children and 45% of adolescents report a lack of interest in the outdoors. As youth age, “not enough time” becomes a more important factor with 43% of young adults 18-24 stating this as the reason they are no longer active in the outdoors (The Outdoor Foundation, 2012).

## How to Increase Participation in Fishing?

### Increase convenience, fun and family/friend orientation.

Most people still engage in recreational activities of some kind, and different strategies are required to recruit new participants into fishing and retain the existing anglers. In order to address the “not enough time” argument angling must be promoted as easily accessible in today’s time-pressed, convenience-driven and electronically-oriented world. We need to ensure that fishing is always associated with fun and relaxation and with convenient fishing opportunities that allow for spending time with family and friends (American Sportfishing Association and Southwick Associates 2012; Figure 7).

The recruitment of youth is needed to build fishing’s future, and family involvement in fishing is crucial in this endeavor. Seventy-six percent of youth, ages 6-12, and 68% of adolescents state “being with family/friends” as the main reason they participate in outdoor activities (The Outdoor Foundation 2012). Programs and activities developed for youth should be fun, family/friend oriented, economical and accessible.

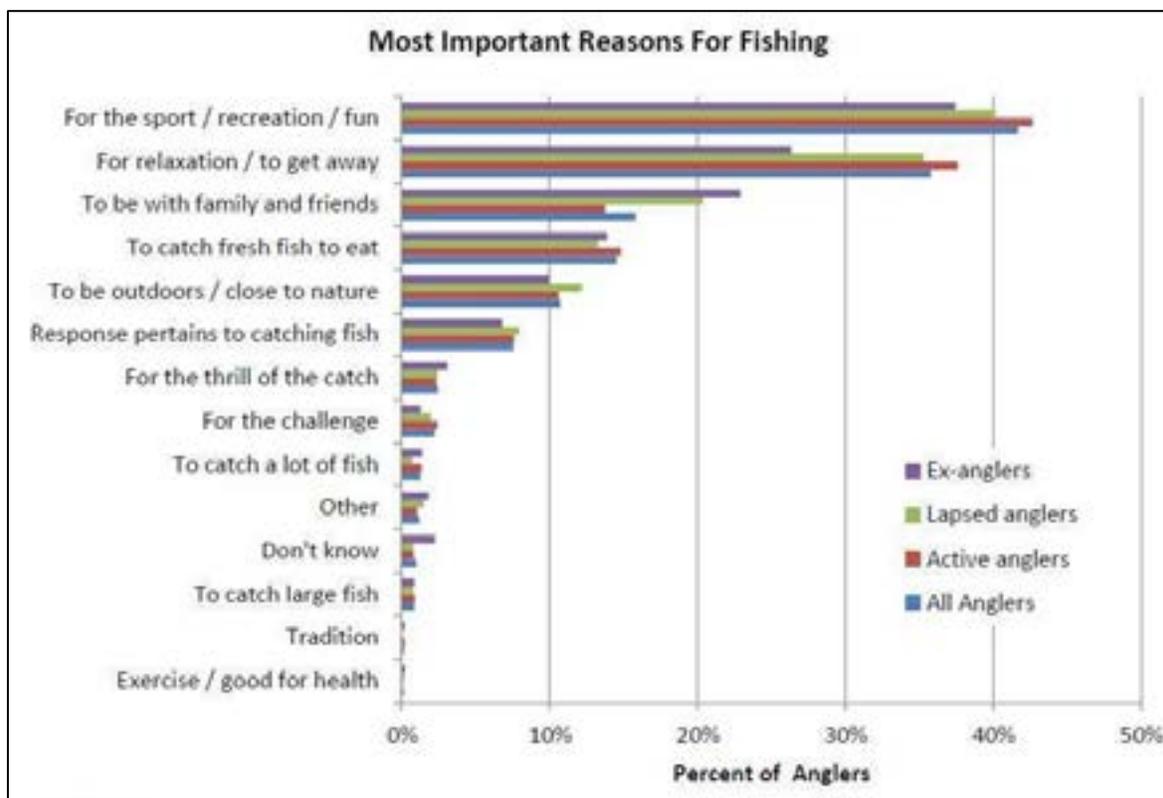


Figure 7. Reasons for Fishing. Results of 2012 U.S. survey.

### Existing and lapsed anglers need fishing to be a fun and social experience.

For an existing angler to continue in the sport, fishing must also remain fun and include family and friends (Figure 7). Offering new and successful fishing experiences and opportunities for anglers to mentor others can provide the stimulus needed to continue fishing long term.

Anglers who are no longer active in the sport also state that fun and being with family/friends were the two main reasons they once fished (Figure 7). The loss of a fishing buddy often leads to an angler dropping out of the sport, and former anglers are likely to fish again if invited by a friend or family member (American Sportfishing Association and Southwick Associates 2012; Figure 8).

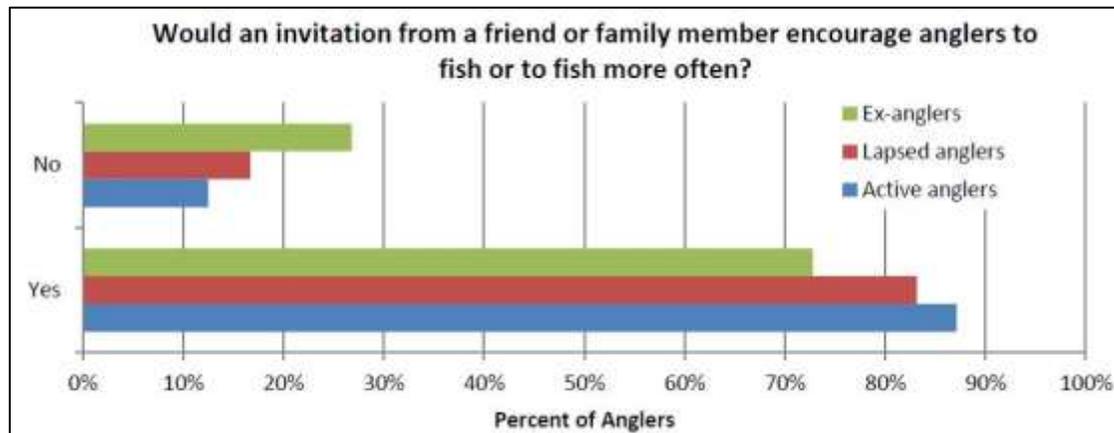


Figure 8. Invitation Encouragement. Results of 2012 U.S. survey.

### Marketing fishing as simple, fun, relaxing, economical and social.

Fishing promotions and messaging must emphasize these aspects. Messages and advertising designed to recruit or retain anglers should not make fishing look complicated. It should instead emphasize how simple and fun it is to catch fish, how relaxing a day at the water can be and the opportunities fishing provides to experience the outdoors with others. Show people from all walks of life, across all ages, gender and ethnic backgrounds fishing. Do not focus on complex, costly or extreme types of fishing. Once people begin fishing, many will grow into those areas naturally.

## *Approach to Angler Recruitment and Retention in Missouri*

In response to the apparent decline in angler participation in Missouri, Fisheries Division initiated a task force in 2001 to identify possible causes of this decline. In 2004, a committee was assigned the task of developing a plan to increase angling participation. They considered current Missouri Department of Conservation (Department) educational efforts as well as other efforts nationwide. They reviewed available information regarding trends in fishing participation, angler education efforts in other states and past angler education efforts in Missouri, and used this information to develop two draft plans, *A Plan to Increase Angling Participation* (2005) and *The Ten Year Plan to Promote Missouri's Fishing Heritage* (2007).

The 2001 task force found that the Recreational Boating and Fishing Foundation (RBFF) provided a sound, research-based structure to begin to build an effective, comprehensive, multi-contact angler education program. This research suggested an angler education program should include introducing children to fishing at a young age to increase the chance that they will fish later in life and 85% of children welcome the opportunity to fish (Responsive Management 2003). Programs which include fishing trips are more effective recruitment tools than those which only talk about fishing (Siemer and Knuth 2001). State fishing programs increase interest and skills in fishing (Rupert and Dann 1998; Fedler 2004); however these programs should not stop with single events. One time fishing events are not effective at nurturing long-term interest in fishing or aquatic conservation (RBFF 2003, Neal and Eades 2008). RBFF's best practices guidelines bluntly sum it up, "Great effort often is expended and large numbers of participants are reached in these single-day events. Short term evaluations generally reflect positive outcomes, and event organizers are proud of their accomplishments. But....without efforts focused on moving participants further along the continuum toward trial and adoption, simply generating interest does little more than make event organizers feel good" (RBFF 2003).

Quality multiple contact experiences with hands-on learning are an effective way to build confidence and recruit new anglers (Rupert and Dann 1998; Siemer and Knuth 2001; Neal and Eades 2008). This develops the skills needed that will then allow continuing the activity on their own. In order for angler education programs to be most effective, they should consist of a series of learning steps with hands-on experience. The GO FISH! (**GO** Fish Interpret and **Share** our **Heritage**) Angler Education Pilot Program was initiated by the Department's Fisheries Division in 2006 to improve angler education and recruitment in the St. Louis area. The program was designed to provide multiple contacts with individual children ages 8-16 as recommended by research from the RBFF. Volunteer fishing instructors were trained and then provided angler education to the general public. Much was learned during the four years of this pilot program effort that can be used across the state.

In 2012 Fisheries Division formed an Angler Recruitment and Retention Committee made up of representatives from several Department divisions as well as Missouri citizens. This group reviewed current Department angler programs and materials to determine what improvements could be made to better target the key areas for angler recruitment and retention. Efforts in other states, national trends and surveys and available Missouri angler information were referenced to determine a plan for angler recruitment and retention in Missouri.

This plan lends emphasis to those actions that will or can impact a broad range Missouri's diverse constituents of both youth and adult anglers, who may be new, lapsed or an existing angler, and is designed to attract new participants as well as maintain existing ones.

The plan represents a base of 10 ideas, displayed as “action plans”, which will be further developed with partners and appropriate personnel as they are implemented. These action plans, along with specific objectives, will be used to make progress toward the goals. There are many reasons for decreased angler activity and often these reasons are linked or related. Many of the same action plans are used to meet the objectives of multiple goals and strategies. Some action plans may be modified as they are further developed and as more input is received and evaluations completed.

In developing this plan, four main goals stood out as the overriding categories that best reflect the anticipated recruitment and retention direction of the Department.

#### Goals

- Introduction and Recruitment of Youth Anglers to Angling (elementary through high school).
- Recruitment of Families into Angling.
- Modifying Permitting for Convenience and Diverse Opportunities for All Types of Anglers.
- Retention of Existing Anglers.



## Strategies

The following areas were researched and strategies developed to achieve our objectives: researching trends and behaviors to determine angling barriers, angling education, marketing, access and opportunities and evaluation of programs.

### Researching Trends and Behaviors

Continual research and monitoring of the ever-changing behavior of Missourians and national trends is required to achieve our goals. In some cases this requires developing our own studies to get answers needed to understand the behavior of the current or potential angler. Market research is an important strategy in reaching every goal, and this research will help to identify barriers that may prevent participation in angling.

### Angling Education

An effective angler education program is an important strategy to recruit new youth anglers and families. In order for a person to participate in fishing, they need to learn how to fish. This includes teaching the novice anglers the basics, or educating existing anglers on new angling techniques, fishing locations or biology. How we reach youth, adults, women and lapsed anglers needs to be tailored to the respective audience in order to impact angling participation.

A fishing experience alone will not recruit anglers; rather it is the quality and frequency of fishing experiences that makes the difference (Otto and Canaday 2012). The chance of creating lifelong anglers increases with repeated angling contacts (Rupert and Dann 1998; Siemer and Knuth 2001; Neal and Eades 2008). State fishing programs increase interest and skills in fishing (Rupert and Dann 1998; Fedler 2004); however these programs should not stop with a single event. One time fishing events are not effective at nurturing long-term interest in fishing or aquatic conservation (RBFF 2003; Neal and Eades 2008). An angling education program should consist of multiple contacts whenever possible. Using existing anglers as volunteer instructors and mentors will help to keep them engaged in the sport while passing on their valuable experience.

### Fishing Access and Opportunities

Providing existing anglers and potential anglers with the ability to conveniently locate good fishing areas is critical, as is providing areas that are designed specifically for use by the angler education program.

### Marketing

As with education, marketing is a powerful tool that can be used to change human behavior. Like education, the messages and processes we use will vary depending on what type of group we want to reach. Department marketing plans and this angler recruitment and retention plan should share common goals that address the barriers that impact angling.

### Evaluation of Programs

Action plans need to be evaluated regularly in order to determine their effectiveness at achieving the desired results of the objectives. Processes as described in the action plan outlines will be put in place that allow for evaluation, as will ideas and approaches developed in coordination with Resource Science Division.

## ***Fishing for the Future***

### ***A Plan for Angler Recruitment and Retention in Missouri***

#### **Problem**

Declining Missouri angler participation rates threaten the rich tradition of our state and overall outdoor participation rates due to fishing's role as a "gateway" activity (RBFF Special Report, 2012). A reduction in outdoor participation rates can diminish Missouri's hunting and fishing heritage and lessen the appreciation for natural resource conservation.

#### **Focus**

*Increase angler recruitment and retention in Missouri by creating stakeholders that actively participate in fishing and recognize it as an important part of conservation in Missouri.*

#### **Goal. Introduction and Recruitment of Youth Anglers to Angling (elementary through high school)**

**ISSUE:** Efforts to develop youth participation in fishing are imperative. Eighty percent of all first-time anglers are 20 years of age or younger and the earlier a person starts fishing the less likely they are to drop out at a later date (USFWS, 2011; Responsive Management, 2003). Youth today seem to have increasingly more activities available to them and fishing must compete with these other activities for their time. Youth fishing programs should focus on the aspect of having success, be a fun and social interaction and build skills and confidence through multiple contact learning. Perhaps the most important factor in gaining and sustaining new youth angler participants is developing a framework of social support for their initial and continued participation. This can be in the form of family support, community support, agency support or a combination.

To accomplish this goal in Missouri we need to take a proactive stance in increasing the exposure to, awareness of and interest in fishing among Missouri's youth through the following objectives enabling us to facilitate and foster participation:

- Continuing the First Fish Program.
- Providing 30,000 youth fishing experiences through 500 fishing clinics annually.
- Providing 6,000 youth fishing experiences through 100 youth programs associated with partners (e.g., schools, scout groups, clubs, 4H, state parks, etc.) annually.
- Providing 3,500 youth fishing experiences through youth fishing days at trout parks annually.
- Supporting the Missouri State High School Activities Association (MSHSAA) to develop a high school angling program.
- Recruitment of youth anglers ages 8-18 using multiple contacts and tracking through a conservation identification number (e.g., Heritage Card).

## Goal. Recruitment of Families into Angling

**ISSUE:** Adults with children in their households participate in fishing at higher levels than adults without children, suggesting that fishing is a family-friendly activity and that connection with youth is essential to building a strong fishing base (RBFF Special Report, 2012). Developing programs specifically for families will build skills and confidence that enable them to continue fishing generation after generation.

Providing quality youth fishing experiences is important, but just as important is the building of a support group for these young anglers. What better support mechanism is there than the family unit? We should strive to increase the number of family-oriented contacts through the following objectives:

- Develop outdoor activities, workshops and angler education programs geared toward family involvement (e.g., Discover Nature-Fishing angler education programs, parent and child and other “bring a kid fishing” activities).
- Recruit participating families targeting those whose youth are already engaged in our outdoor activities.
- Market “free fishing days” and other clinics/events as family activities.
- Develop a “family/group fishing album” similar to First Fish Certificate to allow groups to record special fishing events and activities.

## Goal. Modifying Permitting for Convenience and Diverse Opportunities for All Types of Anglers

**ISSUE:** Anglers move throughout the various stages of participation at different rates and they decrease participation in fishing for many reasons. Most are related to the allocation of time and shifting priorities, work obligations, family obligations and changes in the way recreational time is spent. Studies note the highest satisfaction ratings for most anglers are “relaxation” and “being with family”, with “catching fish” ranking lower (American Sportfishing Association and Southwick Associates 2012). Key efforts for angling consistency need to center around the entire family and the benefits of angling to families, and by increasing the convenience of permit purchasing and renewal.

Although Missouri does not mirror the national trend, our lapsed angler rate is higher than we would like. In order to increase consistency of fishing permit purchasing for the avid and occasional angler (based on data from Missouri permit sales), we should pursue the following objectives:

- Develop a smartphone application for permit renewal. This application would remind anglers of the time for permit renewal, provide a convenient renewal process and provide access to information concerning fishing opportunities and related events.
- Develop at least one new permit that offers increased convenience and/or price incentive to encourage continued and consistent fishing permit purchases.
- Initiate an advertising campaign and direct mailing beginning one (1) month prior to each new season, reminding anglers to renew their permits.
- In partnership with the RBFF, implement a fishing permit direct mail marketing program targeting lapsed anglers to increase fishing permit sales.
- Provide a personalized “Thank You” message to permit purchases from Department administration.
- Develop a system for acquiring email addresses of permit purchasers in order facilitate permit reminders and other notifications.

## Goal. Retention of Existing Anglers

**ISSUE:** Existing anglers represent an important market. They are already interested in some aspect of the sport and are likely to continue. They also “report not enough time” and “takes time away from family” as the top reasons that impact their participation in fishing (American Sportfishing Association and Southwick Associates 2012). Providing angling programs for youth and families will allow the existing angler to find time for family fishing. Providing programs and experiences that expand an angler’s skill, recognizes their accomplishments and provides opportunities for the angler to share their fishing experiences with others will help to keep them engaged in the sport and provide incentives for the active angler to continue fishing.

Missouri has a rich heritage of life-long anglers, and it is critical to develop a way to sustain that history into the future by encouraging and facilitating continued participation of existing anglers. This can be achieved through the following objectives:

- Develop new angling experiences such as workshops on specialized techniques, alternative methods and/or fish identification.
- Continue the State Record Fish and Master Angler Award programs
- Increase efforts to link fishing permit buyers to information products. (e.g., “Fishing Prospects”, weekly fishing report, etc.)
- Develop Web pages (“bragging board”) that allow anglers to “show off” their catch.
- Develop a mentoring/volunteer program with rewards (e.g., program apparel, thank you items, appreciation banquet, etc.).



## Action Plan Summary

### Angler Education

1. Implement a Discover Nature-Fishing Angler Education Program for Families  
Develop a Department volunteer driven platform to conduct programs. (See *Action Plan #1*)
2. Implement a Discover Nature-Fishing Angler Education Program for Schools/Youth Groups  
Develop a “train-the-trainer” program to introduce into schools through the revised Nature Unhooked curriculum, summer camps, youth groups and other organizations that have the appropriate forum to reach potential youth anglers. (See *Action Plan #2*)
3. Support High School Angling Program  
Support the Missouri State High School Activities Association (MSHSAA) to develop an angling program, with the ultimate goal of bass fishing being a sanctioned activity. (See *Action Plan #3*)
4. Create Basic Fishing Instructor’s Manual  
Create a publication for volunteers and staff to use as an instructor guide for angling education that includes material from the existing GO FISH manual. This publication would include the basics of fishing as well as lesson plans. (See [GO FISH manual](#))
5. Identify and Increase Fishing Locations for Angler Education  
Create a system of regional locations specifically suited to conduct angler education programs for public youth, families, continuing education programs and special events. Areas should be convenient, safe, inviting and conducive to a good fishing atmosphere. (See *Action Plan #5*)

### Convenience

6. Strengthen/Expand Rod and Reel Loaner Program  
Improve convenience of rod and reel loaner program to the general public by including local libraries and other civic organizations as distribution points. (See *Action Plan #6*)
7. Develop Smartphone Capabilities  
Develop and provide the ability to download permits and receive notifications/information directly to smartphones. (See *Action Plan #7*)
8. Develop New Permit  
Develop at least one new permit that offers increased convenience and/or price incentive, to encourage continued and consistent fishing permit purchases. (See *Permit Recommendations*)

### Fishing Access and Opportunities

9. Increase Fishing Locations for All Anglers  
Increase efforts for public access through land acquisitions and Community Assistance Program (CAP) agreements with priority given to communities with a lack of fishing opportunities.

### Evaluation

10. Perform Obligatory Incremental Evaluation Periods (3-5 years)  
Resource Science Division will assist in the development of procedures that allow the action plans to be evaluated for success.

## ***Action Plan Outlines***

Six of the Action Plans mentioned above require the cooperation of many partners and Department divisions. An outline for the implementation of these plans is included on the following pages.



## **ACTION PLAN #1: Implement a Discover Nature-Fishing Angler Education Program for Families**

- Plan
  - Develop a Department volunteer driven platform to conduct Discover Nature-Fishing angler education programs for families and include modified GO FISH concepts and curricula into fishing clinics and special events.
- Implementation
  - Use temporary staff positions in each region that are dedicated to recruit and train angling education volunteers. Temporary positions will be initially trained and report to a fisheries regional supervisor or designated staff member.
  - Recruit and train volunteers (15 to 30 per region being the goal) to teach Discover Nature-Fishing material to families. A subset of dedicated volunteers (3 to 5) should be identified as “team leaders” responsible for program preparation, organization and consistency. All other volunteers will act in support of “team leaders”.
  - Regional fishing equipment will be used for Discover Nature-Fishing programs. Volunteers will maintain equipment and notify regional Department staff of any issues/needs. Department hourly staff will support equipment maintenance.
  - Locations identified to conduct Discover Nature-Fishing programs should include an appropriate area for lesson instruction as well as a fishable pond, stocked by the Department as needed to enhance catch.
  - Develop recognition and reward system for volunteer service and accomplishments modeled after the Hunter Education Program.
  - Discover Nature-Fishing programs will be promoted at regional offices, nature centers, partner locations and online.
- Responsibilities
  - *Fisheries*- Share task of volunteer recruitment and training with Outreach and Education (O&E). Lead division for selecting regional coordinator, volunteer coordination, equipment coordination and fish stocking and pond management.
  - *Outreach and Education* - Share task of volunteer recruitment, training, and enrollment with Fisheries. Lead division for Discover Nature-Fishing promotion.
  - *Protection* - Assist with training, identification of schools/youth groups, development of pond network. Responsible for incidental public contact, patrolling and enforcement on designated program lakes.
  - *Other Divisions/Units* – Assist as available/appropriate.
- Resources and Partners
  - Recruit volunteers from current Department volunteer pools, Stream Teams, fishing clubs, non-governmental organizations (NGOs), youth organizations, etc.
  - Fishing retailers/manufacturers will be asked to assist with Discover Nature-Fishing promotion, coupons for graduates, additional equipment, etc.
  - Department, CAP lakes, schools and municipal areas should be identified as locations to host Discover Nature-Fishing programs.

- *Fishing's Future*, a national angler education volunteer network, could potentially provide volunteer coordination in some areas. Staff will explore this option going forward.
- Timeline
  - Year 1 (FY14)
    - Revise the current Discover Nature-Fishing manual to better serve programmatic needs and better represent Department formats. Coordinate with O&E staff to ensure consistency/compatibility with existing programs, publications and resources. Develop numerical program objectives.
    - Begin the hire of a temporary regional employee that is dedicated to recruit and train angling education volunteers.
    - Recruit/train volunteer base.
    - Conduct regional training program with Department staff acting as lead instructors.
    - Establish program locations and fisheries.
    - Identify and develop relationship with "team leaders" for future delegation.
    - Cultivate relationships with local fishing clubs, NGOs, youth organizations, vendors, etc.
    - Solicit underwriting by Bass Pro Shops and Cabela's plus other major equipment manufacturers and providers. For example, Roxanne Coleman/Pure Fishing.
    - Conduct initial pilot programming in each of eight regions during FY14, involving both Department staff (lead) and volunteers.
  - Year 2 (FY15)
    - Begin active promotion of and enrollment into Discover Nature-Fishing program.
    - Hold first, volunteer-led Discover Nature-Fishing programs with assistance from Department staff.
  - Year 3 (FY16)
    - Continue broad scale promotion and enrollment for the modified Discover Nature-Fishing program.
    - Hold multiple Discover Nature-Fishing classes with sole instruction from Department volunteers.
    - Assemble continuing education instructors from Department staff and local fishing clubs.
    - Begin developing Fishing University aimed at generating peer mentors.
    - Begin developing continuing education courses such as: crappie fishing, bowfishing, catfishing, gigging, snagging, ice fishing, trout fishing, fly fishing, fly tying, bait casting, stream fishing, etc.
  - Year 4 (FY17)
    - Continue offering Discover Nature-Fishing programming.
    - Implement Fishing University and offer continuing education courses.

- Evaluation
  - Each Discover Nature-Fishing graduate will receive a conservation identification number (e.g., Heritage Card) in order to track their angling participation into the future. Efforts to track participants and evaluate programming will be developed in coordination with Resource Science Division staff.
  - Volunteers will submit yearly evaluations to Department staff for the angler education program, concentrating on successes, failures and means to improve the effort.



## **ACTION PLAN #2: Implement a Discover Nature-Fishing Angler Education Program for Schools/Youth Groups**

- Plan
  - Develop a “train-the-trainer” program to introduce Discover Nature-Fishing concepts into schools through the revised Nature Unhooked curriculum, summer camps, youth groups and other organizations that have the appropriate forum to reach potential youth anglers.
- Implementation
  - Identify and develop a network of existing fishing ponds (public and private), stocked as needed, to offer schools and other groups to use for the hands-on fishing portion of the Discover Nature-Fishing and Nature Unhooked lessons. Schools with appropriate ponds on their campus or within close proximity will be targeted as priorities.
  - Staff will identify teachers and group leaders who have the appropriate platform to implement the Discover Nature-Fishing program (conservation education classes, summer camps, etc.).
  - Promote Discover Nature-Fishing and Nature Unhooked to school administrators, teachers and other youth group leaders.
  - Central Office Fisheries staff will work with regional staff to develop and present a series of one-day workshops to train teachers and other group leaders on how to teach the Discover Nature-Fishing and Nature Unhooked program materials to their students, campers, group members, etc.
  - Similar to and under the banner of *Discover Nature Schools*, teachers and group leaders who complete the training workshop will receive course manuals and a one-time grant to purchase standardized fishing equipment for their institution.
  - Provide funding for transportation of groups to fishing ponds through grants.
- Responsibilities
  - *Fisheries*- Share task of organizing and conducting Discover Nature-Fishing training workshops. Lead division for developing a fishing pond network and fish stocking.
  - *Outreach and Education* - Share task with Fisheries of organizing and conducting Discover Nature-Fishing training workshops, coordination of course materials and identifying youth groups. Lead division for promoting Discover Nature-Fishing and Nature Unhooked in schools, grant funding and identifying appropriate schools.
  - *Protection* – Assist with training, identification of schools/youth groups, development of pond network. Responsible for incidental public contact, patrolling and enforcement on designated program lakes.
  - *Other Divisions/Units* – Assist as available/appropriate.
- Resources and Partners
  - Instructor base will come from existing teachers, youth group leaders, camp counselors, club presidents, etc.
  - Fishing retailers could assist with Discover Nature-Fishing promotion, coupons for graduates, additional equipment, etc.

- Department/municipal areas should be identified as locations for Discover Nature-Fishing and Nature Unhooked programs. A network of private pond owners could be developed if public resources are not in close proximity of schools.
- Timeline
  - Year 1 (FY14)
    - Abbreviate or tailor the existing GO FISH curriculum to best fit into current Discover Nature classroom curricula. Develop numerical program objectives.
    - Assign GLEs (Grade Level Expectations) or MO Core Standards to Discover Nature-Fishing curriculum.
    - Develop training workshop appropriate for teachers and group leaders.
    - Develop guidelines for awarding grants and course materials to training graduates.
    - Each region will work with one school to pilot a Discover Nature-Fishing in schools program through the revised Nature Unhooked program.
    - Establish a pond network with appropriate fisheries for use by schools and youth groups.
    - Solicit underwriting by Bass Pro Shops and Cabela's plus other major equipment manufacturers and providers. For example, Roxanne Coleman/Pure Fishing.
    - Evaluate pilot school programs for needed changes or expansion.
  - Year 2 (FY15)
    - Make the Discover Nature-Fishing program available, through the revised Nature Unhooked program, to other teachers and youth group members by conducting multiple one-day training workshops as interest grows.
    - Broadly promote Discover Nature-Fishing in schools through the revised Nature Unhooked program, summer camps, youth groups, etc.
    - Continue program pond management.
  - Year 3 (FY16)
    - Continue training workshops.
    - Continue promotion.
    - Continue program pond management.
  - Year 4 (FY17)
    - Continue training workshops.
    - Continue promotion.
    - Continue program pond management.
- Evaluation
  - Each Discover Nature-Fishing graduate will receive a conservation identification number (e.g., Heritage Card) in order to track their angling participation into the future. Efforts to track participants and evaluate programming will be developed in coordination with Resource Science Division staff.
  - Teachers and youth group leaders will submit yearly evaluations of the Discover Nature-Fishing program and Nature Unhooked as well as reports with number of participants.

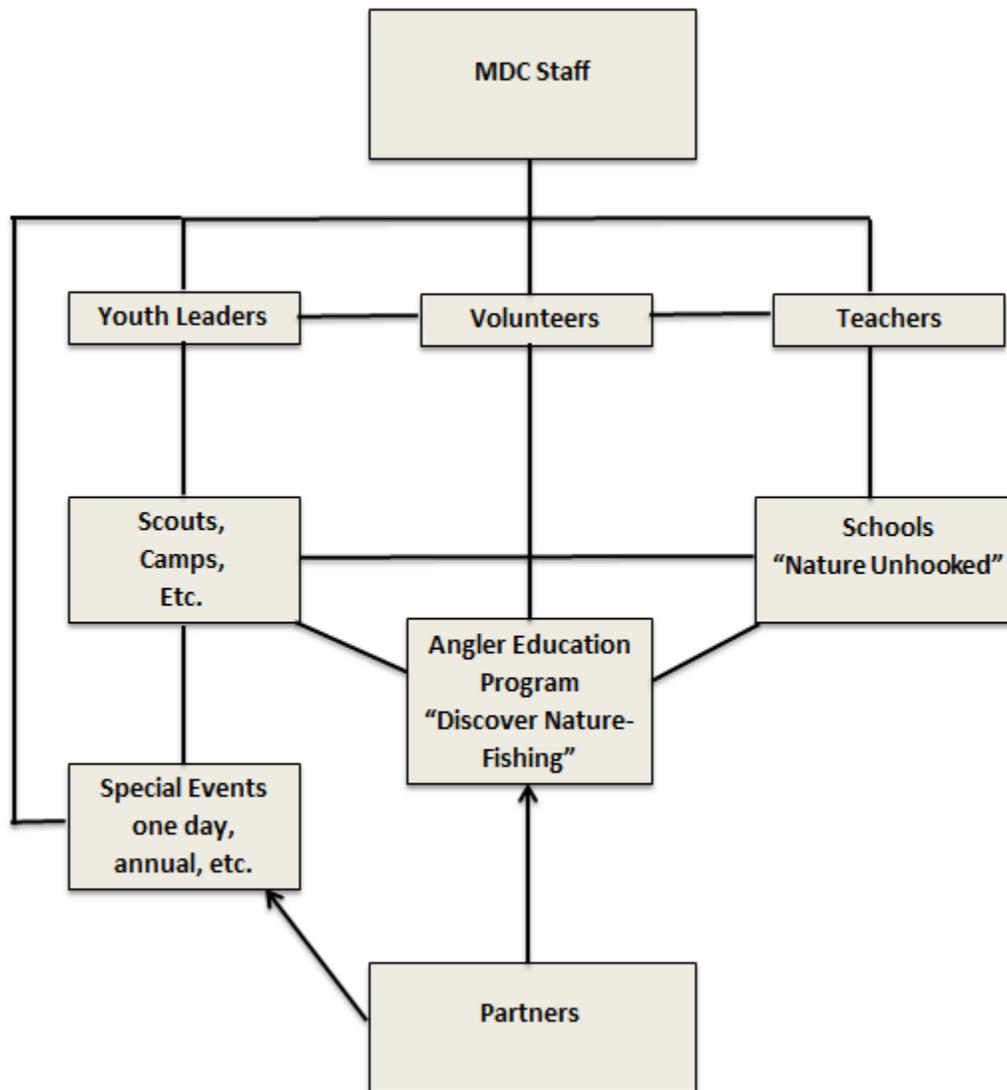


Figure 9. Role of Department staff and stakeholders with angler education program.

### **ACTION PLAN #3: Support High School Angling Program**

- Plan
  - Support the Missouri State High School Activities Association (MSHSAA) to develop an angling program.
- Implementation
  - Obtain data from other states that have sanctioned fishing programs to gauge interest and effectiveness of program; Illinois and Kentucky and others.
  - Meet with MSHSAA, state school administration associations and school counselor associations and present the Department's ideas on angling education and how a competitive high school fishing component could be an important incentive for the elementary age current or potential angler.
  - Gain grass roots interest by approaching other outdoor groups and enthusiasts about their support and involvement in a high school fishing program.
  - Educate and gain support of NGOs: Conservation Federation of Missouri (CFM), etc.
  - Foster a fishing club setting at the high school level in order to establish interest and base for a potentially sanctioned program. Look for developing interest, attend meetings, provide programs and loaner equipment, etc.
  - Use appropriate marketing to promote the awareness of the benefits of high school outdoor activities (specifically fishing). Benefits include: provide focus and goal for younger children, provides constructive extracurricular activities and experiences, fishing is a "gateway" activity to outdoors and conservation. Articles and marketing could highlight high schools with current fishing activities.
- Responsibilities
  - *Fisheries and Outreach and Education* - Share task of meeting with MSHSAA, school organizations and other partners to develop interest and participation.
  - *Fisheries and Outreach and Education* – Develop marketing strategy to promote awareness of the benefits of high school outdoor activities (specifically fishing).
  - *Protection* – Responsible for incidental public contact, patrolling and enforcement on designated program lakes.
  - *School personnel* – Guide and direct individual programs.
  - *Other Divisions/Units* – Assist as available/appropriate.
- Resources and Partners
  - MSHSAA as the sanctioning entity.
  - Athletic directors with local school districts as coordinating personnel at school level.
  - Outdoor organizations: professional anglers, local bass federations and fishing clubs as initial support for the creation of a sanctioned program, and then support and partner at the individual high school level.
  - Nongovernment Organizations (NGOs) – CFM, etc. Initial support for the creation of a sanctioned program.
  - Other state agencies offering support of sanctioned program and providing access to fishing areas.
  - Sport shows providing promotion.

- Volunteers: Discover Nature-Fishing program, FFA instructors and others volunteers providing assistance at the individual high school level.
- Outdoor retailers potentially providing equipment to high schools.
- Students already involved in Department school activities as prime candidates for an additional outdoor-oriented school activity.
- Timeline
  - Year 1 (FY15)
    - Obtain data from other states that have sanctioned fishing programs to gauge progress, participation rates, overall interest and success in schools. For example, Illinois and Kentucky. Subsequently develop a pilot program proposal.
    - Meet with MSHSAA, state school administration associations and school counselor associations and present the Department's ideas on angling education.
    - Foster the growth of fishing clubs within schools.
    - Begin to educate and gain support for high school fishing program with NGOs and other outdoor organizations and enthusiasts.
    - Begin the promotion of benefits on high school fishing.
  - Year 2 (FY16)
    - Continue to foster the growth of high school fishing program within schools.
    - The Department provides recognition for local teams when possible. For example, Master Angler Awards, State Record Fish, etc.
  - Year 3 (FY17)
    - The Department works with MSHSAA to provide recognition system: banquet, awards, Master Angler certificates, etc.
- Evaluation
  - Annual review of numbers of participating partners.
  - Meet annually with MSHSAA board of directors on progress/success of high school fishing program and adjust accordingly.

## **ACTION PLAN #5: Identify and Increase Fishing Locations for Angler Education**

### **Task 1: Department Areas**

- Plan
  - Use Department areas whenever possible to conduct Discover Nature-Fishing education programs for public youth, families, continuing education programs and special events. Areas should be convenient, safe, inviting and conducive to a good fishing atmosphere. Utilize existing Department ponds and lakes with limited new pond construction.
- Implementation
  - Regional Fisheries and O&E staff will identify Department areas that are currently being used for fishing education programs in their areas.
  - As needed, regional Fisheries and O&E staff will consider other potential sites to hold educational programs on their areas.
  - Specific management needs should be identified at fishing locations, including Americans With Disabilities Act (ADA) access, additional stocking needs, appropriate regulation changes, vegetation control and other fisheries management activities to increase probability of success. Additional needs to be considered could be adequate parking, restroom facilities/portable restrooms, picnic benches/seating and storage for fishing equipment.
  - Discover Nature-Fishing programs will be promoted by Department staff at Department areas whenever possible and at other areas frequented by families.
- Responsibilities
  - Central Office Fisheries staff will work with regional offices to develop a central regional contact for aquatic education pond reservations as a convenience for the public. Overall coordination will be vested in the Fisheries Programs Specialist position, and day-to-day coordination will be handled in the regions.
  - Activities will be reported monthly to regional staff to keep track of the activity and to complete any needed federal aid reporting.
  - Regional Fisheries Division staff will work with respective area managers to conduct impoundment management as needed.
  - Fisheries Division staff will use appropriate regulations and stocking to ensure the probability of a good fishing experience. Catch-and-release fishing will be emphasized to help increase the success rate of the anglers and to attain the full benefit of the fish stocked in ponds identified as aquatic education sites. Some selective harvest could be used during the recruitment effort to both introduce new anglers to the concept and to improve the quality of the fish population in the impoundments.
- Resources and Partners
  - All Department Aquatic Resource Education Sites.
- Timeline
  - Year 1 (FY14)
    - Identify Department areas that are currently being used for fishing education programs in each of eight regions. Prioritize event schedule at areas to give provide adequate opportunities for Discover Nature-Fishing programs.

- As needed, identify Department areas that are not currently being used for fishing education programs, but potentially could be.
    - Start improvements and management activities as needed/possible.
  - Year 2 (FY15)
    - Continue improvements and management activities as needed/possible.
  - Year 3 (FY16)
    - Continue improvements and management activities as needed/possible.
  - Year 4 (FY17)
    - Continue improvements and management activities as needed/possible.
- Evaluation
  - Records will be kept on the number and location of all Discover Nature-Fishing education programs to public, youth, families, continuing education programs and special events. (See example of attached field trip form). Efforts to track participants and evaluate programming will be developed in coordination with Resource Science Division staff.

## **Task 2: CAPs (Community Assistance Program)**

- Plan
  - Use CAP sites when Department sites are not available to conduct Discover Nature-Fishing education programs to public youth, families, continuing education programs and special events. Increasing CAP agreements can bring better fishing to urban areas.
- Implementation
  - Regional fisheries staff will evaluate for effectiveness the current CAP areas used for fishing education programs. Evaluations should include when those agreements expire, terms of the current agreement as they pertain to renovations/improvements, etc.
  - As needed, regional Fisheries staff will consider other new impoundment potential CAP sites to hold educational program. Communities with an obvious lack of fishing opportunity should be high priority for development of a nearby CAP lake.
  - Specific management needs should be identified at fishing locations, ADA access, additional stocking, regulation changes, vegetation control and other fisheries management to increase probability of success.
  - Discover Nature-Fishing programs will be promoted at Department areas first unless CAP waters provide better infrastructure and amenities, and/or “close to home” opportunity.
- Responsibilities
  - Central Office Fisheries staff will work with regional offices to develop a central regional contact for aquatic education pond reservations as a convenience for the public.
  - Activities will be reported monthly to regional staff to keep track of the activity and to complete any needed federal aid reporting.
  - Regional Fisheries Division staff will work with respective area managers (partner representatives) to conduct impoundment management as needed.

- Fisheries Division staff will use appropriate regulations and stocking to ensure the probability of a good fishing experience. Catch-and-release fishing will be emphasized to help increase the success rate of the anglers and to attain the full benefit of the fish stocked in ponds identified as aquatic education sites. Some selective harvest could be used during the recruitment effort to both introduce new anglers to the concept and to improve the quality of the fish population in the impoundments.
- Resources and Partners
  - Cities and counties where need exists and who have the resources available and are willing to partner.
- Timeline
  - Year 1 (FY14)
    - Identify CAP areas that are currently being used or could be used for fishing education programs in each of eight regions.
    - Start improvements and management activities as needed/possible.
  - Year 2 (FY15)
    - Continue improvements and management activities as needed/possible.
  - Year 3 (FY16)
    - Continue improvements and management activities as needed/possible.
  - Year 4 (FY17)
    - Continue improvements and management activities as needed/possible.
- Evaluation
  - Records will be kept on the number and location of all Discover Nature-Fishing education programs to public, youth, families, continuing education programs and special events. (See example of attached field trip form). Efforts to track participants and evaluate programming will be developed in coordination with Resource Science Division staff.

### **Task 3: Private and Other Government Agency Waters**

- Plan
  - A network of private pond owners, retailer's ponds, NGOs and other government agency waters should be developed if public resources are not in close proximity to schools and population centers to provide fishing areas for the Discover Nature-Fishing education programs, continuing education programs and special events.
- Implementation
  - Regional staff will identify private and other government agency areas that are currently being used or could be used for fishing education programs in their areas.
  - As needed, regional Fisheries staff will consider additional ponds and lakes owned by other government agencies, private companies and private individuals for possible sites to hold fishing activities. Private Land Services Division staff may be asked to assist in working with selected pond/lake owners.

- Responsibilities
  - Fisheries, Outreach and Education and Protection staffs will work jointly to identify sites for Discover Nature-Fishing events at private locations whenever Department and CAP locations are not available.
  - Fisheries will limit the amount of fisheries management available at these sites and, in most cases, will not provide any, or very limited, fish stockings to these locations.
  - Activities will be reported monthly to regional staff to keep track of the activity and to complete any needed federal aid reporting.
- Resources and Partners
  - Locations could include ponds and lakes owned by other government agencies, private companies and private individuals.
- Timeline
  - Year 1 (FY14)
    - Evaluate current and potential Department and CAP areas for angler education programs to determine need for private and other government agency waters.
    - As needed, develop relationships with private pond and lake owners and other partners and implement programs at selected locations.
  - Year 2 (FY15)
    - As needed, develop relationships with private pond and lake owners and other partners and implement programs at selected locations.
  - Year 3 (FY16)
    - As needed, develop relationships with private pond and lake owners and other partners and implement programs at selected locations.
  - Year 4 (FY17)
    - As needed, develop relationships with private pond and lake owners and other partners and implement programs at selected locations.
- Evaluation
  - Records will be kept on the number and location of all Discover Nature-Fishing education programs to public, youth, families, continuing education programs and special events. (See example of attached field trip form). Efforts to track participants and evaluate programming will be developed in coordination with Resource Science Division staff.

This is an example of the form used at Prairie Hollow Lake at the Reed Area. The form is distributed and filled out during each day of each fishing event or activity at this site and must be returned at the end of the event. This information will be needed for federal aid reporting and give an indication of the quality of fishing. Keeping it simple and short will insure that quality information is returned. Numbers and species of fish caught are not required due to the fact that these are not often accurately reported. Information like names, birthdates and conservation numbers if needed should be collected before the event for evaluation purposes.

Due to the fact that some areas are used for other activities, the "field trip" form may vary from area to area.

## ***Missouri Department of Conservation Prairie Hollow Lake Field Trip Form***

Please complete a form for each fishing field trip. If a group goes fishing more than once, submit a single summary form for each of the group's field trips. The information you provide will help us evaluate our efforts to provide a good fishing experience for the anglers. ***ALL RULES AND REGULATIONS ARE ATTACHED TO THE CONFIRMATION FORM THAT WAS MAILED TO THE GROUP LEADER.*** Special limits are in effect on this lake. All fish must be released unharmed immediately after being caught so that another angler can enjoy this experience.

GROUP LEADER: \_\_\_\_\_ PHONE #: \_\_\_\_\_

EMAIL  
ADDRESS: \_\_\_\_\_

GROUP/ORGANIZATION: \_\_\_\_\_

TRIP DATE: \_\_\_\_\_ # OF INDIVIDUALS FISHING: \_\_\_\_\_

# OF INDIVIDUALS CATCHING AT LEAST ONE FISH: \_\_\_\_\_

# OF LEADERS, HELPERS, INSTRUCTORS NOT FISHING: \_\_\_\_\_

AVERAGE TIME SPENT HELPING WITH EACH PERSON FISHING: \_\_\_\_\_

TOTAL # OF ALL INDIVIDUALS INVOLVED IN OTHER ACTIVITIES (PLEASE LIST THE ACTIVITIES): \_\_\_\_\_

AVERAGE TIME SPENT IN OTHER ACTIVITIES (PLEASE LIST BY ACTIVITIES):  
\_\_\_\_\_

## Action Plan #6: Strengthen/Expand Rod and Reel Loaner Program

**Issue:** The purpose of this segment of the program is to introduce more people to the fun of fishing. The lack of equipment can prevent people from fishing, and some people may be reluctant to purchase equipment prior to a first fishing experience.

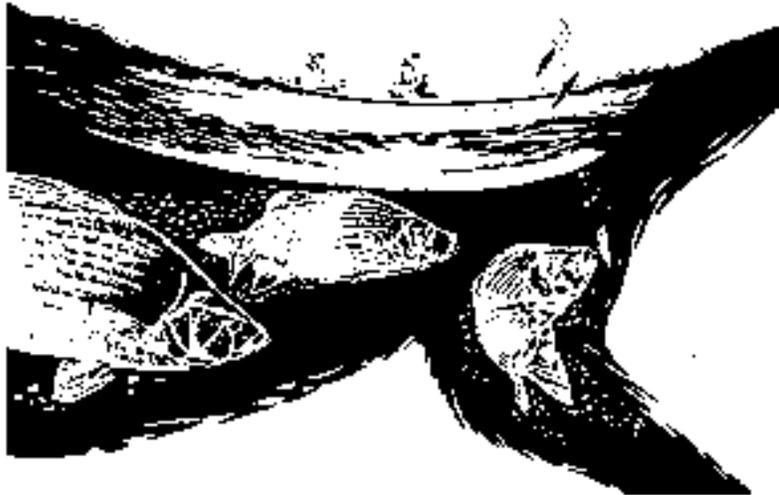
- Plan
  - Develop a fishing equipment loaner program statewide – each region participates at level of need determined in consultation with Central Office Fisheries Division staff. This is an expansion of the already established fishing equipment loaner program at each regional office. The purpose of this portion of the program is to provide another outlet for individuals to obtain fishing equipment.
- Implementation
  - Regional Fisheries staff will coordinate with interested local public libraries in the implementation of the Rod and Reel Loaner Programs.
  - The Rod and Reel Loaner Program will be promoted at partner participating locations, Department offices and on the Department website.
- Responsibilities
  - *Fisheries Division* staff will coordinate the participation of libraries and funding at the regional level.
  - *Fisheries Division* staff will also be responsible for new locations, securing the fishing equipment and matching volunteers with loaner locations. Areas without convenient access to the current rod and reel loaner locations would have higher priority.
  - *Protection and Outreach and Education* volunteers can assist Fisheries Division staff with coordination.
- Program promotion of the rod loaner program will be accomplished through media releases by participating libraries and Department. For example, Protection Division staff can advertise the program on their radio shows. Resources and Partners
  - Participating partnering libraries, local civic organizations or fishing groups can promote the program and assist with implementation and equipment purchase.
  - Outreach and Education and Protection can share with Fisheries the coordination of volunteers to participate and assist with the operation of the program and in the maintenance of equipment.
- Timeline
  - Year 1 (FY14)
    - Strengthen our existing equipment loaner programs by setting up these library Rod and Reel Loaner Program sites at selected locations in each of eight regions.
    - Identify public libraries as partners to expand our Rod and Reel Loaner Program to other major communities within each region.
    - Conduct rod and reel inventory of current loaner program.
    - Each region will work with Central Office Fisheries Division staff to determine how extensive the Rod and Reel Loaner Program will be promoted and guidelines as needed for the population served.

- In the spring, provide a fishing program at selected libraries to kick off the fishing season. (i.e., mid-April through October)
    - Secure funding source to purchase rods, reels and some terminal tackle from the Department budget, grants or local organizations.  
Fishing rods can be available to check out from April 15 to October 15. This will provide ample time for equipment maintenance during the off-season. Annual maintenance can be performed by Protection or O&E volunteers: (Nature Center volunteers and Volunteer Naturalists) or regional staff.
  - Year 2 (FY15)
    - Evaluate program and make any necessary adjustments.
    - Continue to contact and expand into other public libraries, or contact other possible locations to provide the Rod and Reel Loaner Program. For example, University Extension offices or State Parks.
    - Coordinate with volunteers to ensure that the localities have functioning equipment.
  - Year 3 (FY16)
    - Continue promotion of the Rod and Reel Loaner Program and promote where there is adequate volunteer staff to run the program.
  - Year 4 (FY17)
    - Continue promotion of the Rod and Reel Loaner Program and promote where there is adequate volunteer staff to run the program.
- Evaluation
  - The program can be evaluated by using the existing library card tracking system. The regional coordinator will contact the library annually for numbers of times poles were checked out and to make sure the equipment is in good working order. Overall maintenance will be done once a year during the time when poles are not being used. More frequent maintenance will be done as needed.
  - The regional coordinator will submit a yearly evaluation of the equipment usage with comments on program development and any recommendations from library staff regarding the program.

## **ACTION PLAN #7: Develop Smartphone Capabilities**

- Plan
  - Develop and provide the ability to download permits and receive notifications/information directly to smartphones. These recommendations will need to be fully developed with our IT and Administrative Services Division.
- Implementation
  - IT staff will develop a permit delivery system using Apple’s Passbook feature in iOS6 (free Android applications are available to utilize Apple Passbook files) or similar software. This feature allows for distributing all types of media to smartphones without having to develop an actual application.
  - IT staff will develop a plan for using the push notification feature of Passbook or similar software to notify permit holders of the availability of fishing reports, *Fishing Prospects*, permit expirations, etc.
  - IT staff will include on the back of each smartphone (e.g., Passbook) permit: links to the Department’s mobile website, Operation Game Thief phone number, Telecheck phone number, etc.
  - IT staff will develop a barcode for Passbook or similar software with necessary information for conservation agents to scan and check permits in the field.
- Responsibilities
  - *Fisheries*- Share task of developing smartphone (e.g., Passbook) permit with IT.
  - *Information Technology* – Lead for producing Passbook or similar software features.
  - *Protection* – Assist in making smartphone (e.g., Passbook) permits a valid/usable permit.
- Resources and Partners
  - Administrative Services Division/IT staff.
  - Protection and other Department Staff serving to test new smartphone (e.g., Passport) permits.
- Timeline
  - Year 1 (FY15)
    - Develop smartphone (e.g., Passbook) fishing permit and notification of expiration process. Option for additional feature would be a simple “check-in” system to track angler habits.
    - Conduct “pilot” program with Department staff acting as first users of the smartphone (e.g., Passbook) permits.
    - Establish permit checking procedures for conservation agents. Retain a secondary option for agents to utilize for permit verification when cell reception or ability to scan is not available. For example, POS Law Enforcement Support line.
  - Year 2 (FY16)
    - Begin distribution of smartphone (e.g., Passbook) permits to the general public.
    - Begin notifying permit holders of the expiration date and providing avenue to renew from notification.
  - Year 3 (FY17)
    - Develop location-based angler survey.

- Look for opportunities to expand smartphone (e.g., Passbook) permits to other permit types.
- Evaluation
  - Determine usage rate of permit buyers.
  - Determine effectiveness of permit renewal notification.
  - Determine ability of conservation agents to check permits safely using Passbook permits.
  - Adjust system as needed.



## Angler Recruitment and Retention Plan-Years 1-4 Schedule

(Specifics found under Action Plans description)

PLAN #	TITLE/DESCRIPTION	FY14	FY15	FY16	FY17
<b>1</b>	<b>Implement a Discover Nature-Fishing Angler Education Program to Families</b>				
	<i>Revise the current GO FISH manual to better serve programmatic needs and Department formats.</i>	•			
	<i>Begin the hire of temporary employee in each region that is dedicated to recruit and train angling education volunteers.</i>	•			
	<i>Recruit/train volunteer base. Ongoing and dependent on need.</i>	•	•	•	•
	<i>Conduct a regional training program with Department staff acting as lead instructors.</i>	•			
	<i>Establish program locations and fisheries.</i>	•			
	<i>Identify and develop relationship with "team leaders" for future delegation.</i>	•			
	<i>Cultivate relationships with local fishing clubs, NGOs, youth organizations, vendors, etc.</i>	•			
	<i>Solicit underwriting by Bass Pro Shops, Cabela's and other equipment providers.</i>	•			
	<i>Conduct initial pilot programming in each of eight regions during FY14, involving both Department staff (lead) and volunteers.</i>	•			
	<i>Begin active promotion of and enrollment into Discover Nature-Fishing program.</i>		•		
	<i>Hold first, volunteer-led Discover Nature-Fishing programs with assistance from Department staff.</i>		•		
	<i>Continue broad scale promotion and enrollment for the Discover Nature-Fishing program.</i>			•	
	<i>Hold multiple Discover Nature-Fishing classes with sole instruction from Department volunteers.</i>			•	
	<i>Assemble continuing education instructors from Department staff and local fishing clubs.</i>			•	
	<i>Begin developing Fishing University aimed at generating peer mentors.</i>			•	
	<i>Begin developing continuing education courses in specialized fishing techniques.</i>			•	
	<i>Continue offering Discover Nature-Fishing programming.</i>				•
	<i>Implement Fishing University and offer continuing education courses.</i>				•

PLAN #	TITLE/DESCRIPTION	FY14	FY15	FY16	FY17
<b>2</b>	<b>Implement a Discover Nature-Fishing Angler Education Program in Schools/Youth Groups</b>				
	<i>Abbreviate or tailor the Discover Nature-Fishing curriculum to best fit into current classroom curricula.</i>	•			
	<i>Assign GLEs or MO Core Standards to Discover Nature-Fishing curriculum.</i>	•			
	<i>Develop training workshop appropriate for teachers and group leaders.</i>	•			
	<i>Develop guidelines for awarding grants and course materials to training graduates.</i>	•			
	<i>Each region will work with one school to pilot a Discover Nature-Fishing in schools program through the revised Nature Unhooked.</i>	•			
	<i>Establish a pond network with appropriate fisheries for use by schools and youth groups.</i>	•			
	<i>Solicit underwriting by Bass Pro Shops, Cabela's and other equipment providers.</i>	•			
	<i>Evaluate pilot school programs for needed changes or expansion.</i>	•			
	<i>Make the Discover Nature-Fishing program available to other teachers and youth group members by conducting multiple one-day training workshops as interest grows.</i>		•	•	•
	<i>Broadly promote Discover Nature-Fishing in schools, summer camps, youth groups, etc.</i>		•	•	•
	<i>Continue program pond management.</i>		•	•	•
<b>3</b>	<b>Support High School Angling Program</b>				
	<i>Obtain data from other states that have sanctioned programs. For example, Illinois and Kentucky.</i>		•		
	<i>Meet with MSHSAA and other school associations and present the Department's ideas on angling education.</i>		•		
	<i>Foster the growth of fishing clubs within schools.</i>		•	•	•
	<i>Begin to educate and gain support with NGOs, and other outdoor organizations and enthusiasts.</i>		•		
	<i>Begin the promotion of benefits on High School fishing.</i>		•		
	<i>Department staff works with MSHSAA to provide recognition system: banquet, awards, Master Angler certificates, etc.</i>				•

PLAN #	TITLE/DESCRIPTION	FY14	FY15	FY16	FY17
<b>4</b>	<b>Create Basic Fishing Instructor's Manual</b>				
	<i>Create a publication for volunteers and staff to use that includes materials from the existing GO FISH manual.</i>	•			
	<i>Reprint manual as needed.</i>		•		•
<b>5</b>	<b>Identify and Increase Fishing Locations for Angler Education</b>				
	<i>Identify Department areas that are currently being used for fishing education programs in each of eight regions.</i>	•			
	<i>Identify Department areas that are not currently being used for fishing education programs, but have existing ponds that potentially could be.</i>	•			
	<i>Start improvements and management activities as needed/possible.</i>	•			
	<i>Continue improvements and management activities whenever possible.</i>		•	•	•
	<i>Evaluate current and potential Department areas for angler education programs to determine need for private and other government agency waters.</i>	•			
	<i>As needed, develop relationships with private pond and lake owners and other partners and implement programs at selected locations.</i>	•	•	•	•
<b>6</b>	<b>Strengthen/Expand Rod and Reel Loaner Program.</b>				
	<i>Evaluate current regional loaner program.</i>	•			
	<i>Identify potential library partners.</i>	•			
	<i>Provide a fishing program at selected libraries to promote fishing season.</i>	•			
	<i>Acquire fishing equipment through funding and/or donations.</i>	•			
	<i>Begin loaner program at new locations from April 15th to October 15th.</i>	•			
	<i>Evaluate program for necessary changes.</i>		•		
	<i>Expand into other libraries or civic organizations.</i>		•		
	<i>Coordinate with volunteers to ensure that the localities have functioning equipment.</i>		•		
	<i>Continue promotion of the Rod and Reel Loaner Program.</i>			•	•

PLAN #	TITLE/DESCRIPTION	FY14	FY15	FY16	FY17
<b>7</b>	<b>Develop Smartphone Capabilities</b>				
	<i>Develop smartphone (e.g., Passbook) fishing permit and notification of expiration process.</i>	•			
	<i>Conduct "pilot" program with Department staff acting as first users of the smartphone (e.g., Passbook) permits.</i>	•			
	<i>Establish permit checking procedures for conservation agents.</i>	•			
	<i>Begin distribution of smartphone (e.g., Passbook) permits to the general public.</i>		•		
	<i>Begin notifying permit holders of the expiration date and providing avenue to renew from notification.</i>		•		
	<i>Develop location-based creel survey.</i>			•	•
	<i>Look for opportunities to expand smartphone (e.g., Passbook) permits to other permit types.</i>			•	•
<b>8</b>	<b>Develop New Permit</b>				
	<i>Develop at least one new permit that offers increased convenience and/or price incentive.</i>	•			
	<i>Offer at least one new permit that offers increased convenience and/or price incentive.</i>		•		
	<i>Continue to offer new permit</i>			•	•
<b>9</b>	<b>Increase Fishing Locations for All Anglers</b>				
	<i>Increase efforts for public access through land acquisitions and Community Assistance Program (CAP) agreements with priority given to communities with a lack of fishing opportunities.</i>	•	•	•	•
<b>10</b>	<b>Perform Obligatory Incremental Evaluation</b>				
	<i>Evaluate the action plans for effectiveness and modified as needed.</i>			•	•

## Permit Recommendations

The following ideas and concepts were developed by the Angler Recruitment and Retention Committee for further consideration and appropriate development. Further consideration should include feasibility, likelihood of increasing angler participation/retention and possible impacts on federal aid funding. Changes will be implanted only following detailed consideration by the Department's Regulations Committee and the Director and approval by the Conservation Commission.

- **Multi-year young adult permit (16-20)** – Develop a “teen” or “young adult” permit, with price incentives to encourage continued and consistent fishing permit purchases for older teens, college students and young adults.
- **Multi-Day permit** – Offer discounted multi-day permit to encourage out-of-state anglers to fish in Missouri.
  - Three day and/or seven day permit.
  - Reduced additional daily permits. “Bargain Days.” For example, \$7 initial daily and \$6 for each additional day. Additional days must be purchased at the same time as initial daily.
- **Joint Fishing permit** – Offer an additional, discounted permit to adults at same address that may be less frequent purchasers. Could also be called “buddy”, “household” or “spouse” permit.
- **“Date Of Purchase” permit** – Permit expiration will be based on date of purchase. The knowledge that permits are good for a full year could increase participation.
- **“Continuity” permit** – As an incentive for anglers to purchase a permit every year, offer a discount off regular permit price of \$1 per year for up to 5 years. If an angler misses a year, the permit price starts over at regular price. To qualify for reduced pricing, the angler must present previous permit within 30 days of expiration at time of sale.
- **Senior citizen annual permit (65 and older)** – Minimal price permit. Good for data collection of huge angling demographic, while also capturing more federal reimbursement dollars. “Grandfather in” current senior citizens. For example, anyone born before 1947 is exempt.
- **Permit Authorization Number** – Change permit system procedure to incorporate an immediate authorization number for automated, online or smartphone purchases. This number could be carried instead of signed permit as currently stated in *Wildlife Code* or until a permit is mailed to the purchaser. This could better accommodate today's electronic technology and those “spur of the moment” angling opportunities.
- **Collect email address at point of sale** – Include email address as part of the permit purchasing process. Developing an email list of permit purchasers will be beneficial when mass marketing, surveys or correspondence is needed.
- **Receive federal reimbursement dollars annually** – Consider changes in the process whereby permits are counted so that a multi-year permits are counted each year for federal reimbursement dollars.

## Literature Cited

**American Sportfishing Association and Southwick Associates. 2012.** On The Fence About Fishing: A Study of Why Anglers Do and Don't Fish and What Will Get Them on the Water.

**Fedler, A. J. 2004.** National fishing and boating education grant initiative: 2003–2004 evaluation survey results. Recreational Boating and Fishing Foundation, Alexandria, Virginia. Available: [http://www.rbff.org/uploads/Research\\_section/2003-04\\_Evaluation\\_Survey\\_Report- Final.pdf](http://www.rbff.org/uploads/Research_section/2003-04_Evaluation_Survey_Report- Final.pdf)

**Neal, J. and R. Eades. 2008.** Urban and community fisheries programs: development, management, and evaluation – a summary. Pages 455-463 in R.T. Eades, J.W. Neal, T.J. Lang, K.M. Hunt, P. Pajak, editors. Urban and community fisheries programs: development, management, and evaluation. American Fisheries Society, Symposium 67, Bethesda, Maryland.

**Otto, D. and B. Canaday. 2012.** GO FISH! Pilot Program Final Report.

**The Outdoor Foundation. 2012.** Outdoor Recreation Participation Report 2012  
<http://www.outdoorfoundation.org/pdf/ResearchParticipation2012.pdf>

**Recreational Boating & Fishing Foundation (RBFF). 2003.** Best Practices Workbook for Boating, Fishing, and Aquatic Resources Stewardship Education. Recreational Boating and Fishing Foundation, Alexandria, Virginia. Available: [http://www.rbff.org/uploads/Resources\\_bestpractices/FINAL\\_Workbook\\_Layouts\\_11-6-03.pdf](http://www.rbff.org/uploads/Resources_bestpractices/FINAL_Workbook_Layouts_11-6-03.pdf)

**Recreational Boating & Fishing Foundation and The Outdoor Foundation. 2012.** Special Report of Fishing and Boating. <http://www.outdoorfoundation.org/pdf/ResearchFishing2012.pdf>

**Responsive Management. 2003.** Factors Related to Hunting and Fishing Participation Among the Nation's Youth. Phase V: Final Report. Responsive Management. Harrisburg, Va.

**Rupert, J.D. and S.L. Dann. 1998.** Fishing in the Parks: A research-based outreach program. Fisheries 23(6): 19-27.

**Siemer, W. F. and B. A. Knuth. 2001.** Effects of fishing education programs on antecedents of responsible environmental behavior. The Journal of Environmental Education 32(4):23–29.

**United States Fish and Wildlife Service. 2011.** National Survey of Fishing, Hunting and Wildlife-Associated Recreation: State Overview. U.S. Government Printing Office: Washington D.C.

