



Take Me Fishing™ in Iowa

An Evaluation of the 2006 Iowa DNR Marketing Program

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Executive Summary

This is the second year of a pilot project between the Recreational Boating and Fishing Foundation (RBFF) and the Iowa Department of Natural Resources (IDNR) focused on enhancing Iowa resident fishing license sales through integrated marketing activities. The impetus for the project was concern over declining resident fishing license sales occurring from 2002 to 2004. The 2005 project focused on increasing license sales in three Iowa counties in the I-380 Corridor: Black Hawk, Johnson and Linn.

The 2005 project targeted lapsed male anglers in the three counties by using an advertising campaign coupled with fishing-related information in the form of direct mail. Results of the 2005 project were encouraging as the short-term objective of reversing the license sales decline was achieved. License sales averaged nine percentage points higher during the May-June program compared to counties where no marketing was undertaken.

The success of the 2005 pilot project resulted in interest in expanding the marketing program in the same three-county area in 2006. Whereas the 2005 project targeted lapsed anglers, the 2006 project was designed to additionally determine if marketing activities could affect renewals by 2005 license buyers and first-time buyers (recruits) in 2005.

For the 2006 program, the IDNR decided to focus on the same demographic of males, aged 25 to 54. The three groups of interest within this demographic included:

- 2005 Renewals: Anglers buying a resident fishing license in 2003 and/or 2004, and also 2005.
- 2005 Lapsed: Anglers buying a resident fishing license in 2003 and/or 2004, but not 2005.
- 2005 Recruits: Anglers buying a resident fishing license for the first time in 2005.

As in the previous project, the 2006 pilot project targeted license buyers in Black Hawk, Johnson and Linn counties.

The following 2006 objectives for the three target groups were based on results from the 2005 program:

- 2005 Renewals: In 2006, the target group's renewal rates will be 5 percentage points greater than the control group.
- 2005 Lapsed: In 2006, the target group's renewal rates will be 4 percentage points greater than the control group.
- 2005 Recruits: In 2006, the target group's renewal rates will be 3 percentage points greater than the control group.

As a first step, the IDNR wanted to find out more about Iowa's lapsed anglers and why they choose to not purchase fishing licenses annually; half of the angling pool of license buyers purchase only intermittently. The IDNR hired a market research firm to facilitate three focus groups of lapsed anglers (specifically, anglers who purchased two out of the last three years). Participants told researchers they needed two primary things: more reminders and encouragement to go fishing and more information about where they will have a high probability of catching fish locally.

From this information, the IDNR created several marketing strategies to reach the target market. These activities were implemented from May through July 2006. They included weekly e-mail fishing forecasts, radio advertising, family fishing events, additions to the IDNR website, license vendor packets and media coverage. In addition, targeted anglers were sent a customized letter from their local fisheries biologist providing information on top area fishing spots, fishing tips, maps and a promotion of the e-mail information distribution system.

The 2006 marketing program should be viewed as a success for several reasons. All three target groups responded positively to the advertising and direct mail activities. Advertising and direct mail combined produced much better results overall than advertising only. The 2005 renewal group was slightly more responsive than the 2005 lapsed or 2005 recruit groups. The overall differences between purchase rates for the three groups in the target and control counties ranged from an overall average of 6.4 percentage points for 2005 renewals to 4.6 percentage points for the 2005 recruits. These effects of the marketing program were achieved during a period when license sales statewide were in decline.

The overall license sales impact exceeded the cost of the program. A total of 1,501 new licenses were sold in 2006 because of the marketing program. The overall return on investment was a positive 1.28:1. These benefits were generated predominantly by anglers with the most active buying histories in the renewal and lapsed subgroups.

The impacts of the marketing program resulted from a combination of advertising and direct mail. The small effect of advertising only should not discount its overall value at this point in our understanding. Since we did not have a group that received only the direct mail and were not exposed to the advertising, we cannot rule out the possibility of a combined effect between advertising and direct mail. Future efforts should evaluate this additional component to achieve a better understanding of this relationship.

The biologist's letter was a novel direct mail piece and appears to have been effective with all three groups. Providing local fishing information from a credible source caught the attention of nearly 40% of the recipients. This compares to 31% who recalled the Family Fishing Guide in the 2005 marketing program. However, the recall of the biologist's letter was skewed towards the renewal group, which makes sense because this group is comprised of anglers who are more active, and thus may seek information that will help them improve their success. It might be expected that the 2005 recruits would also be seeking information to enrich their fishing experiences as well. This was not the case as this group had a recall rate for the letter below that of the lapsed angler group and may reflect a lack of interest or commitment to fishing.

Additional research into the information needs and constraints experienced by new recruits would likely shed some needed light on this group of anglers.

An analysis of license sales at the end of the year is clearly needed because of the decline in sales through July of 2006, a period when 80% of licenses are sold. It may result in some additional understanding of the decline particularly when compared to sales in 2004 and 2005. This analysis may also uncover any extended effects of the marketing program that persisted through August or September when sales typically drop off sharply.

It is very clear that the marketing program did not affect all subgroups of license buyers within the renewal and lapsed groups equally. The greatest benefits of the marketing program were received from those anglers with a longer buying history. Future marketing efforts strategically directed at these groups may yield greater benefits to the IDNR.

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An Evaluation of the 2006 Iowa DNR Marketing Program

Introduction

This is the second year of a pilot project between the Recreational Boating and Fishing Foundation (RBFF) and the Iowa Department of Natural Resources (IDNR) focused on enhancing Iowa resident fishing license sales through integrated marketing activities. The impetus for the project was concern over declining resident fishing license sales occurring from 2002 to 2004. The 2005 project focused on increasing license sales in three Iowa counties in the I-380 Corridor: Black Hawk, Johnson and Linn¹.

The 2005 project targeted lapsed male anglers in the three counties by using an advertising campaign coupled with fishing-related information in the form of direct mail. Results of the 2005 project were encouraging as the short-term objective of reversing the license sales decline was achieved. License sales averaged nine percentage points higher in the three target counties during the May – June program compared to counties where no marketing was undertaken.

Target Audience

The success of the 2005 pilot project resulted in an interest in expanding the marketing program in the same three-county area in 2006. Whereas the 2005 project targeted lapsed anglers, the 2006 project was designed to additionally determine if marketing activities could affect renewals by 2005 license buyers and first-time buyers (recruits) in 2005.

For the 2006 program, the IDNR decided to focus on the same demographic of males, aged 25 to 54. The three groups of interest within this demographic included:

- 2005 Renewals: Anglers buying a resident fishing license in 2003 and/or 2004, and also 2005.
- 2005 Lapsed: Anglers buying a resident fishing license in 2003 and/or 2004, but not 2005.
- 2005 Recruits: Anglers buying a resident fishing license for the first time in 2005.

As in the previous project, the 2006 pilot project targeted license buyers in Black Hawk, Johnson and Linn counties.

Program Objectives

In 2005, the Iowa planning team set a long-term objective to increase resident fishing license sales to 2002 levels (43,903) by January 1, 2008 in the target counties. Objectives for 2005 and 2006 were incrementally set to achieve this long-term objective. The 2006 marketing program objectives were as follows:

¹ The 2005 project report is available on www.rbff.org under Research/Program Evaluation

- Over the duration of the marketing campaign (May and June) the percentage change in license sales from 2005 to 2006 in the target counties will be 10 percentage points greater than in the control counties.
- Resident fishing license sales in the target counties will increase by 3% in 2006 when compared to 2005 fishing license sales (42,899).
- 2005 Renewals: In 2006, the target group's renewal rates will be 5 percentage points greater than the control group.
- 2005 Lapsed: In 2006, the target group's renewal rates will be 4 percentage points greater than the control group.
- 2005 Recruits: In 2006, the target group's renewal rates will be 3 percentage points greater than the control group.

2006 Marketing Program

The IDNR's 2006 marketing program built upon the *Take Me Fishing*[™] national advertising campaign and the learning from the 2005 pilot project. As a first step, the IDNR wanted to find out more about Iowa's lapsed anglers and why they choose not to purchase a fishing license annually; half of the angling pool of license buyers purchase only intermittently. The IDNR hired a market research firm to facilitate three focus groups of lapsed anglers (specifically, anglers who purchased two out of the last three years). Participants told researchers they needed two primary things: more reminders and encouragement to go fishing and more information about where they will have a high probability of catching fish locally.

From this information, the IDNR created several marketing strategies to reach the target market. The following activities were implemented from May through July 2006.

- **Weekly Fishing Forecast E-Mails.** The IDNR created a distribution system to send weekly forecasts of Iowa fishing hotspots to e-mail subscribers. The information already was being collected from fisheries biologists and sent to local papers. Anglers signed up for the e-mails on the IDNR web site.
- **Direct Mail Customized Letter.** Targeted anglers who had not yet purchased their fishing license by May 15, 2006 were sent a customized letter from their local fisheries biologist giving top fishing spots in the area. The letter also included fishing tips, maps and a promotion of the weekly fishing report e-mail distribution system.
- **Radio Ads.** From May 15 through July 4, radio ads ran on four top stations for the target audience (males ages 25-54) in the three-county area. The ads included 30 seconds of RBFF's *Take Me Fishing* messaging and 30 seconds of customized messaging from the IDNR.
- **Family Fishing Events.** As part of Free Fishing Weekend in June, the IDNR hosted family fishing events at three lakes in the region. The events included live radio remotes, prize giveaways and mini fishing workshops.

- **Iowa DNR Web Site.** The home page of the IDNR’s web site included a banner promoting fishing, along with helpful and updated information on the fisheries pages.
- **License Vendor Packets.** All fishing license vendors received an explanation of the marketing campaign, fact sheets and business cards promoting the e-mail distribution system.
- **Media Coverage**
 - Weekly news packets for television stations
 - Weekly radio shows
 - Weekly Iowa Outdoors packet
 - Iowa Conservationist – March/April issue
- **Park and Recreation Ads.** Ads were placed in the Cedar Rapids, Marion, and Hiawatha park and recreation catalogs.
- **Healthy Fish.** A “Healthy Fish” fact sheet was created for distributed to IDNR staff and license retailers, along with distribution in parks, explaining the safety tips (and debunking myths) relating to eating fish.
- **Event Promotion and Educational Efforts.** Events were held May - August. IDNR staff and/or county conservation board staff assisted with events. The following is a list of events/activities scheduled in conjunction with local parks and recreation offices as well as events scheduled in state parks for Free Fishing Days.

Black Hawk	June 3	George Wyth State Park,	Family Fishing Fair
Black Hawk	Aug. 1-4	George Wyth State Park,	Waterloo Outdoor Adventurers Day Camp
Johnson	June 3	FW Kent Park Lake, Tiffin	Fishing Clinic
Johnson	June 4	Lake MacBride State Park, Solon	Family Fishing Fair
Johnson	July 6	North Ridge Park, Coralville	Camp Coralville Fishing Event
Johnson	July 30	North Ridge Park, Coralville	Fly Fishing
Linn	May 18	Thomas Park, Marion	Fish Art T-shirts
Linn	June 3	Pinicon Ridge Park, Central City	Youth Fishing Clinic
Linn	June 3	Cedar Lake, Cedar Rapids	Family Fishing Fair
Linn	June 6	Thomas Park, Marion	Youth Fishing Clinic
Linn	June 25	Guthridge Park, Hiawatha (Farmer's Market)	Fish Crafts
Linn	July 13	Thomas Park, Marion	Pond Critters
Linn	July 16	Guthridge Park, Hiawatha (Farmer's Market)	Fishing Basics
Linn	July 30	Guthridge Park, Hiawatha (Farmer's Market)	Fishing Fun

Methods and Procedures

The IDNR electronic license database was used to identify all anglers qualifying for each of the three buying groups (2005 Renewals, 2005 Lapsed and 2005 Recruits) from target and control counties. The target counties consisted of Black Hawk, Johnson and Linn counties while the control counties were represented by Cero Gordo, Polk, Pottawattamie, Scott, Story and Woodbury counties. The control counties were chosen based on similarities in demographics, license sales trends from 2002 to 2005, and license buying characteristics.

A sample of buyers from each of the three buyer groups was randomly selected and assigned to a target group that would receive the direct mail letter. The remaining group members were assigned to a control group to aid in determining the effect of the direct mail. These control groups were exposed to the same advertising activities as the target groups but did not receive the direct mail letter. Sample sizes for target and control counties as well as the direct mail target and control groups were as follows:

Target Counties

2005 Renewals	15,586 – 6,300 direct mail, 9,286 control
2005 Lapsed	23,675 – 6,700 direct mail, 16,975 control
2005 Recruits	8,817 – 2,000 direct mail, 6,817 control

Control Counties

2005 Renewals	27,503
2005 Lapsed	45,936
2005 Recruits	15,066

The evaluation was conducted at three levels. The first level was a comparison of license purchase rates of anglers in the three target counties with those in the control counties. If the program activities had an overall effect, then we would expect license purchase rates for each of the target groups in the target counties to be higher than those in the control counties. This difference between the target and control purchase rates is termed “lift” by market researchers. Lift is defined as the difference between the observed rate from the treatment or target group and the expected rate from the control group.

The second level of analysis compared the effects of advertising only and advertising with direct mail in the target counties to the control counties. Purchase rates for the target groups receiving advertising and direct mail were compared to purchase rates for the same three control groups receiving advertising only and the same three groups in the control counties that did not receive any advertising or direct mail.

The third level of analysis consisted of a mail survey of direct mail recipients to assess recall of advertising and direct mail activities. Comparisons of license purchase rates among those who recalled and did not recall receiving the direct mail were made for the three target groups. The mail survey was sent to a randomly selected group of 5,000 individuals drawn from among the overall group receiving the direct mail. The survey was conducted primarily to identify recall rates of the various advertising activities and the direct mail letter. Secondly, the survey

elicited responses to questions regarding motivations for fishing, constraints to fishing participation, and other background characteristics that could lead to insights that might be helpful in providing information to anglers in future marketing efforts. The survey questionnaire can be found in Appendix A.

Results

License Sales

During the first seven months of 2006 resident fishing license sales declined compared to 2005 (Table 1). This occurrence is a reversion back to the declines of 2002 to 2004. Statewide, license sales through July were down by 1.2% in 2006, but declines in the target and control counties were about one-sixth of the statewide rate.

Table 1: Resident fishing license sales and year to year percent change: January – July, 2002-2006

Counties	2002	2003		2004		2005		2006	
	Number	Number	% Chg.	Number	% Chg.	Number	% Chg.	Number	% Chg.
Target	40,792	40,119	-1.6%	38,079	-5.1%	39,417	3.5%	39,328	-0.2%
Control	70,576	69,780	-1.1%	66,895	-4.1%	67,835	1.4%	67,672	-0.2%
Remaining	191,303	189,202	-1.1%	179,230	-5.3%	183,408	2.3%	180,100	-1.8%
Total	302,671	299,101	-1.2%	284,204	-5.0%	290,660	2.3%	287,100	-1.2%

License buyers in any one given year can be categorized into one of three groups: renewals by previous year buyers, lapsed anglers not buying in the previous year or longer, and new recruits. Anglers renewing their licenses from the previous year are normally the largest group and have a much greater renewal percentage than lapsed anglers. Lapsed anglers, as an overall group, tend to have a very low purchase rate. Each year that a license is not purchased reduces the probability that an individual will buy a license during the following year. The final group of buyers contains new recruits. These individuals have no record of previous license purchases in the license database. In the case of the IDNR, new recruits may have purchased a license in 2001 or earlier years, however these transactions occurred prior to the establishment of the electronic database.

A comparison of license purchases by each of the three component groups for 2006 is shown in Table 2. The overall purchase rate for the 2005 renewal category was 3.5 percentage points greater in the target counties than in the control counties. The purchase rate for all lapsed buyers was about a third of the renewal group. The purchase rate for 2005 lapsed buyers was about one percentage point higher in the target counties. The percentage of 2006 recruits among all license buyers was 23.6% and 20.5% in the control and target counties, respectively.

Table 2: Comparison of 2006 resident license purchases for component groups for target and control counties

	Control Counties			Target Counties		
	Total Eligible	2006 Sales	Purchase Rate	Total Eligible	2006 Sales	Purchase Rate
2005 Renewals	72,904	42,955	58.9%	42,523	26,516	62.4%
2005 Lapsed	49,703	8,588	17.3%	25,570	4,652	18.2%
2006 Recruits	na	15,909	100.0%	na	8,016	100.0%

Note: Fishing license sales data for January 1 through July 31

Effects of Marketing Program

Table 3 shows the impacts of the advertising and direct mail activities compared to the control group where no advertising or direct mail occurred over the course of the 11-week evaluation period. The May 16 to July 31 time period was appropriate because it captures the license buying activity during the time when the advertising and direct mail activity occurred and the residual license sales that may have occurred following the main program effort. Renewal rates were calculated for the subgroups of buyers in the renewal and lapsed categories. The best response to advertising only was among the most active buying subgroup (2003, 2004 and 2005). The renewal rate among this group (52.3%) was 5.2 percentage points greater than the control group (47.1%) of similar buyers. Those anglers who were exposed to the advertising and also received the direct mail bought licenses at a rate 7.7 percentage points greater than the control group (54.8% vs. 47.1%).

Table 3: Effect of advertising and direct mail on resident fishing license sales in target and control counties: May 16 through July 31, 2006

Buyer Groups	Control			Target					
	No Advertising or Direct Mail			Advertising Only			Advertising with Direct Mail		
	Potential Buyers	2006 Buyers	Renewal Rate	Potential Buyers	2006 Buyers	Renewal Rate	Potential Buyers	2006 Buyers	Renewal Rate
2005 Renewals									
2003, 2004 & 2005	14,841	6,990	47.1%	4,966	2,595	52.3%	3,588	1,967	54.8%
2004 & 2005	7,292	2,450	33.6%	2,372	837	35.3%	1,496	575	38.4%
2003 & 2005	5,370	1,616	30.1%	1,965	601	30.6%	1,199	398	33.2%
Total	27,503	11,056	40.2%	9,303	4,033	43.4%	6,283	2,940	46.8%
2005 Lapsed									
2003 & 2004	10,538	1,775	16.8%	3,821	661	17.3%	1,998	468	23.4%
2004 Only	14,383	1,650	11.5%	5,106	674	13.2%	1,999	328	16.4%
2003 Only	21,015	1,780	8.5%	8,052	782	9.7%	2,699	371	13.7%
Total	45,936	5,205	11.3%	16,979	2,117	12.5%	6,696	1,167	17.4%
2005 Recruits	15,066	3,281	21.8%	6,821	1,627	23.9%	1,996	526	26.4%
Total	15,066	3,281	21.8%	6,821	1,627	23.9%	1,996	526	26.4%
Overall Total	88,505	19,542	22.1%	33,103	7,777	23.5%	14,975	4,633	30.9%

Response to advertising only by the remaining two subgroups of buyers in the renewal category was slightly greater than their respective control groups, indicating a modest overall effect of the advertising. However, when advertising and direct mail were considered together, the effect improved to 3.1 percentage points for the 2003 & 2005 subgroup (33.2% vs. 30.1%) and 4.8 percentage points for the 2004 & 2005 subgroup (38.4% vs. 33.6%). In these latter two cases, the direct mail had an important effect on renewal rates. Whether or not the direct mail alone was the catalyst for improved sales is not known as there was no direct mail group that was not exposed to the advertising. Future evaluation designs should contain a group that receives the direct mail only without exposure to advertising to better isolate the effects of the direct mail.

Advertising alone produced only slight effects among the three lapsed buyer subgroups (Table 3). Much stronger effects were seen among the three subgroups that received the direct mail in conjunction with the general advertising. These effects ranged from 4.9 percentage points for the 2004 Only subgroup (16.4% vs. 11.5%) to 6.6 percentage points for the 2003 & 2004 subgroup (23.4% vs. 16.8%). Again, benefits were shown for lapsed buyers that received the direct mail letter from their regional biologist.

Only a modest effect of the advertising only activities was seen in the 2005 recruit group (Table 3). However, the 4.6 percentage point response (26.4% vs. 21.8%) to advertising and direct mail combined among this group, while below that of the three lapsed subgroups, still showed a significant impact from the direct mail.

Across all subgroups, advertising only showed a small significant effect overall, although a substantial effect was seen for the 2003, 2004 & 2005 renewal subgroup. The direct mail activity showed a very significant effect on renewal rates for all subgroups. The overall effect was 8.8 percentage points greater than in the control counties.

Direct Mail Survey

A mail survey (Appendix A) sent to a random sample of direct mail recipients was conducted primarily to identify recall rates of the various advertising activities and the direct mail letter. Secondly, the survey elicited responses to questions regarding motivations for fishing, constraints to fishing participation, and other background characteristics that could lead to insights that might be helpful in providing information to anglers in future marketing efforts. The survey was sent to 5,000 randomly selected direct mail recipients. The response rate was low as 592 usable surveys were returned; a 12% response rate. Unusable surveys were returned with either incomplete or entirely missing information.

Responses to the mail survey questions are shown in Table 4. The responses are presented in summary form. Those questions where statistical differences were found among renewal, lapsed and recruit groups are presented in Table 5.

The survey began by asking respondents about how they currently received fishing information. An overwhelming 91.9% reported they received their fishing information by word

of mouth from friends and family. Tackle and bait shops were information sources for half the respondents. Surprisingly, 39.2% said they received information e-mails from the IDNR. Another 25.5% indicated the *Iowa Game & Fish* magazine was their source.

A large majority (60.6%) of respondents felt receiving local fishing tips from the IDNR would be very beneficial. Few said it would not at all be beneficial. When asked how they would like to receive information from the IDNR, website and postal mail were the most frequently cited means. About one-third of the respondents indicated that IDNR e-mail, newspaper and tackle shops would be good methods as well.

Respondents were asked if they recalled seeing or hearing information from five different sources. Nearly 70% of the respondents said they saw advertising from one or more of the sources. "Take Me Fishing" radio ads was the most common advertising mentioned (49.5%) followed by the direct mail letter (31.9%) and family fishing events at local parks (29.2%). Lower recall was given to information from retail stores and park and recreation guides.

Fishing promotion advertising was seen by 64% of the respondents during the two month marketing program. Of those seeing the advertising, two-thirds heard the advertising on the radio, half saw it on television, and about one-fifth saw it in a magazine.

When asked if advertising with a child asking, "Take me fishing" was seen or heard, about 57.9% of the respondents reported they had seen the advertising. A small number of respondents (14.2%) reported that the information they saw or heard influenced their decision to go fishing or buy a license.

Nearly 38% of the respondents recalled receiving the biologist's letter. Of those recalling the letter, 61.6% indicated the information contained in the letter was very or extremely useful. About one-third said it was somewhat useful. Very few of the recipients thought the information contained in the letter was slightly or not at all useful.

A majority of the survey respondents who recalled the biologist's letter noticed the different types of information contained in it. The fishing tips and information on local fishing locations received the most attention. Local maps, invitations to family fishing events and visiting the IDNR website were all noticed by about half of those recalling the letter. Few respondents reported using any of the information contained in the letter. Suggestions for local places to fish, information from the IDNR website and local maps were the most frequently used types of information. Very few respondents said they used the family fishing event information.

Few respondents also said that the information in the biologist's letter influenced their decision to buy a fishing license during 2006. The 13.2% who said the information influenced their decision accounted for 21% of the respondents (31 of 149) that had not already reported purchasing a license.

Table 4: Mail survey questionnaire responses

Where do you currently receive fishing information? (Q4)	% No	% Yes	n
By word of mouth from friends, family and others	8.1	91.9	592
Obtain from local retailer such as a tackle and bait shop	46.6	53.4	592
Receiving regular e-mails from the DNR	60.8	39.2	592
From <i>Iowa Game & Fish</i> magazine	74.5	25.5	592
DNR's Iowa Conservationist magazine	83.4	16.6	592
Receive in the mail	89.2	10.8	592
Read in the newspaper or a magazine	94.8	5.2	592
Visit DNR web site	96.8	3.2	592

How beneficial would it be to receive fishing tips on your local area from the DNR? (Q5)	%	n
Not at all beneficial	6.9	41
Slightly beneficial	32.5	192
Very beneficial	60.6	358
Total	100.0	591

Which method of receiving information would be most helpful to you? (Q6)	% No	% Yes	n
Visit DNR web site	51.4	48.6	591
Receive in the mail	54.7	45.3	591
Read in the newspaper or a magazine	65.1	34.9	591
Receiving regular e-mails from the DNR	66.7	33.3	591
Obtain from local retailer such as a tackle and bait shop	69.0	31.0	591

Do you recall seeing or hearing any of the following in the past two months? (Q7)	% No	% Yes	n
"Take Me Fishing" radio ads	50.5	49.5	592
<i>DNR letter</i> mailed to my home	68.1	31.9	592
No, I didn't notice any of this advertising	69.4	30.6	592
Family fishing events at state or city parks	70.8	29.2	592
Information at Wal-Mart or other store	86.7	13.3	592
Local Park and Recreation Guides	89.2	10.8	592

During the past two months did you notice any advertising specifically promoting fishing? (Q8)	% No	% Yes	n
I noticed this advertising	36.0	64.0	592
Yes, on the radio	31.4	68.6	260
Yes, on television	50.9	49.1	186
Yes, in magazines	79.7	20.3	77

Did you see or hear fishing advertising that included a child asking, "Take me fishing"? (Q9)	%	n
Yes	57.9	343
No	42.1	249

Table 4: Mail survey questionnaire responses - Continued

Did any of this information influence you to go fishing or buy a license? (Q10)	%	n	
No	58.8	348	
Yes	14.2	84	
Previously purchased a license	27.0	160	
Do you recall receiving a letter from your regional fisheries biologist? Q11)	%	n	
No	62.2	372	
Yes	37.8	226	
How useful was the information in the letter? (Q12)	%	n	
Not at all useful	2.2	5	
Slightly useful	4.5	10	
Somewhat useful	31.7	71	
Very useful	46.0	103	
Extremely useful	15.6	35	
Mean ¹	3.68	224	
Did you see and/or use any of the following in the letter? (Q13)	% Noticed	% Used Info.	n
Suggestions on best places to fish locally	71.8	15.5	220
Visit the DNR web site for fishing information and prize offer	49.5	13.6	220
Maps of local locations	54.5	13.2	220
Tips for successfully catching different types of fish	75.0	8.2	220
Invitation to family fishing event	52.3	4.5	220
Did this letter influence you to buy a fishing license this year? (Q14)	%	n	
No	50.2	118	
Yes	13.2	31	
Already Purchased	36.6	86	
Total	100.0	235	

¹Mean is based on a 5-point scale ranging from (1) Not at all useful to (5) Extremely useful.

As mentioned earlier, those questions where statistical differences found among renewal, lapsed and recruit groups are shown in Table 5. Few differences were found among the three types of license buyers. There were very sharp differences among renewal, lapsed and 2005 recruit license buying groups with regard to whether they received fishing information from newspapers or magazines, in general, and the *Iowa Game & Fish* magazine specifically. Many of the anglers in the renewal group (62.2%) sought their fishing information from the *Iowa Game & Fish* magazine and 55.6% reported that newspapers or magazines, in general, were their information sources. About 30% of the anglers in the lapsed group indicated they sought information from magazines or newspapers, and the *Iowa Game & Fish* magazine. Somewhat surprisingly, few anglers in the 2005 recruit group sought information from newspapers or magazines (11.2%) or the *Iowa Game & Fish* magazine (8.2%).

When asked if any of the advertising influenced their decision to buy a fishing license or go fishing, 48.8% of the renewal group reported it did influence their decision. Nearly 30% of the lapsed group said it had an impact, while 21.4% of the 2005 recruit group indicated it influenced their decision.

There were very clear differences among the three groups regarding recall of the regional biologist’s letter as well (Table 5). The same pattern of responses, as noted above, applies to the letter recall. Anglers in the renewal group had the highest recall (49.6%) followed by the lapsed (31.4%) and 2005 recruit (19.0%) groups.

Actual 2006 resident fishing license sales were used to determine the purchase rates for each of the three buyer groups represented in the mail survey. As shown on the bottom row of Table 5, the license purchase rates of mail survey respondents followed the same pattern for their aggregate counterparts in Table 3. The renewal group had the highest purchase rate among mail survey respondents at 60.3%. This compares to the average rate of 46.8% for all anglers in the renewal group in the target counties. Anglers in the lapsed group from the survey were the least likely to purchase a 2006 license (24.8%), which compares to an average of 17.4% for the overall lapsed group in Table 3. The 2005 recruit group had renewal rates between the renewal and lapsed groups. About 35% of the 2005 recruits in the mail survey bought a license compared to 26.4% in Table 3. The differences in comparative buying rates between Table 3 and Table 5 for the three buyer groups should not be of concern for three reasons. First, different samples of the same population will yield different results. The mail survey response rate was very low and thus may not have adequately represented the purchase rates of the three groups in the target counties. Second, anglers that are more committed to the sport tend to respond to surveys with greater frequency than anglers whose interest in angling is not central to their lifestyles. The consistently higher buying rates across all three groups attest to this point. Finally, the general trend in buying among the three groups in Table 3 was confirmed in Table 5. That is, the renewal group had the highest purchase rate while the lapsed group had the lowest.

Table 5: Responses for license buying groups for mail survey questions where statistical differences were found

	% Yes			p
	2005 Renewals	2005 Lapsed	2005 Recruits	
Do you currently receive fishing information from newspapers or magazines? (Q4d)	55.6	32.2	11.2	0.048
Do you currently receive fishing information from <i>Iowa Game & Fish</i> magazine? (Q4g)	62.2	29.6	8.2	0.017
Did any of this information influence you to go fishing or buy a license? (Q10)	48.8	29.8	21.4	0.010
Do you recall receiving a letter from you regional biologist? (Q11)	49.6	31.4	19.0	0.009
Bought a 2006 fishing license (from license database records)	60.3	24.8	34.9	<.001

Analysis of 2006 Objectives

Because the focus of this evaluation was on the effects of the advertising and direct mail activities during the months of May and June, it did not consider resident fishing license sales beyond July 31. As a result, we were not able to directly address the overall objective of a three percent increase in license sales from 2005 to 2006 in the target counties. However, from data in Table 1, the prospects of achieving this increase are poor given the overall decline in license sales in the target counties. The positive side of the sales picture is that the declines would have been worse in the absence of the marketing program.

Marketing program objectives for all three buyer groups were met for those anglers exposed to the advertising and direct mail activities. The 2005 renewal group objective of a five percentage point increase in renewal rates was exceeded by the overall 6.6 percentage point increase for the group (Table 3). However, the 2003, 2004 & 2005 subgroup was the only subgroup within this buyer group to exceed the objective. The 2004 & 2005 subgroup was close to meeting the objective with a 4.8 percentage point difference. The 2003, 2004 & 2005 subgroup also met the objective with advertising only.

The four percentage point increase for the 2005 lapsed buyer group was again met by those anglers exposed to both advertising and direct mail. The overall renewal rate was 6.1 percentage points greater than the control group. All subgroups met this objective as well. However, the objective was not met for any of the advertising only lapsed buyer subgroups.

The overall objective of a three percentage point increase in renewal rates for the 2005 recruit buying group was likewise met for those in the advertising and direct mail category. The 4.6 percentage point increase was very encouraging as previous marketing efforts have not been directed at this group. However, the use of advertising only failed to meet the objective.

Fishing License Sales Benefits

The following discussion of the net benefits of the 2006 marketing program is based on the data in Table 6. To estimate the impact of the program on license sales in the target counties, the difference in renewal rates between the control counties and advertising only group, and control counties and advertising and direct mail group was calculated.

The first step in estimating the benefits of the program was to calculate the number of licenses sold as a result of the marketing program. This was done by calculating the difference between the renewal rate for advertising only and the control renewal rate, and the advertising and direct mail renewal rate and control renewal rate for each of the subgroups in the 2005 Renewal, 2005 Lapsed and 2005 Recruit categories. These calculations yield the “net rate” for each subgroup. The number of potential buyers was then multiplied by the net rate to produce “net sales” for each subgroup. An example of these calculations, from Table 6, is shown in the example below.

Example for 2005 Renewals – Subgroup 2003, 2004 & 2005 (Advertising Only)

Calculations: $52.3\% - 47.1\% = 5.2\%$ (Net Rate) X 4,966 (Potential Buyers) = 258 (Net Sales)

2005 Renewals	Control	Advertising Only		Advertising & Direct Mail		Advertising Only		Advertising & Direct Mail		Total Net Sales
	Renewal Rate	Potential Buyers	Renewal Rate	Potential Buyers	Renewal Rate	Net Rate	Net Sales	Net Rate	Net Sales	
2003, 2004 & 2005	47.1%	4,966	52.3%	3,588	54.8%	5.2%	258	7.7%	276	534
2004 & 2005	33.6%	2,372	35.3%	1,496	38.4%	1.7%	40	4.8%	72	112
2003 & 2005	30.1%	1,965	30.6%	1,199	33.2%	0.5%	10	3.1%	37	47
Total							308		385	693
2005 Lapsed										
2003 & 2004	16.8%	3,821	17.3%	1,998	23.4%	0.5%	19	6.6%	132	151
2004 Only	11.5%	5,106	13.2%	1,999	16.4%	1.7%	87	4.9%	98	185
2003 Only	8.5%	8,052	9.7%	2,699	13.7%	1.2%	97	5.2%	140	237
Total							203		370	573
2005 Recruits	21.8%	6,821	23.9%	1,996	26.4%	2.1%	143	4.6%	92	235
Total							654		847	1,501

Total net sales for advertising only (654), and advertising and direct mail (847) are then summed across all subgroups to produce the total number of licenses sold (1,501) that were attributable to the marketing program.

The next step in estimating the benefits of the marketing program was to calculate the value of the net sales to the IDNR in terms of license revenue and Sport Fish Restoration (SFR) apportionments. A total of 1,501 new licenses were sold in 2006 because of the marketing program. This represents resident fishing licenses sold that otherwise would not have been purchased. The revenue generated to the IDNR is \$17.00 for each license. Therefore, the total value of the additional licenses sold was \$25,517.

The second component of program benefits consists of an increase in Iowa's apportionment from the SFR fund. However, this benefit will not be received by the IDNR until 2008. The reason for this delayed benefit is that 2006 license sales will become part of the formula for calculating 2008 SFR apportionments to states. This lag results from the reporting of full-year license sales to the U.S. Fish and Wildlife Service and the sales certification process used by the Service. Thus, the SFR apportionment benefits received in 2008 should be counted as a benefit for the 2006 program since that was when they were initially generated.

The SFR benefits per license sold can be estimated by dividing the 2006 apportionment of \$4,232,551 by 2004 certified license sales of 429,689. This yields an apportionment of \$10.11

per license. So, the estimated SFR benefit for the 1,051 new licenses sold would be \$15,175. Total economic benefits are determined by adding license sales and SFR revenues. These combined benefits totaled \$40,692.

To estimate return on investment (ROI), the program benefits, calculated above, were divided by the costs of the marketing program. The costs of the program totaled \$31,664 for the marketing activities. Dividing total benefits by program costs shows the ROI of the program. The ROI for the 2006 marketing program was 1.28:1 or \$1.28 generated for each dollar invested in the program.

Conclusions

The 2006 marketing program should be viewed as a success for several reasons. First, all three buyer groups and subgroups responded positively to the advertising and direct mail activities. However, advertising and direct mail combined produced much better results overall than advertising only. The exception to this overall result was the 2003, 2004 & 2005 renewal subgroup. Advertising only was very effective with this subgroup, which responded three to four percentage points greater than any of the other subgroups. Response by this subgroup to advertising and direct mail, while best among all subgroups, appeared to be strongly influenced by advertising.

The remaining two subgroups of 2005 renewals and all of the 2005 lapsed subgroups and 2005 recruits responded minimally to advertising only, but they responded very well to advertising and direct mail. Response rates to advertising and direct mail for all groups exceeded three percentage points. The main conclusion here is that those anglers who bought a license most frequently and most recently responded the best to advertising and direct mail.

The overall differences between renewal rates for the three groups in the target and control counties ranged from an overall average of 6.4 percentage points for 2005 renewals to 4.6 percentage points for the 2005 recruits. These effects of the marketing program were achieved during a period when license sales statewide were in decline.

Second, the overall license sales impact exceeded the cost of the program. The overall return on investment was a positive 1.28 to 1. These benefits were generated predominantly by anglers with the most active buying histories in the renewal and lapsed subgroups.

The impacts of the marketing program resulted from a combination of advertising and direct mail. The small effect from advertising only should not discount its overall value at this point in our understanding. Since we did not have a group that received only the direct mail and were not exposed to the advertising, we cannot rule out the possibility of a combined effect between advertising and direct mail. Future efforts should evaluate this additional component to achieve a better understanding about this relationship.

The biologist's letter was a novel direct mail piece and appears to have been effective with all three groups. Providing local fishing information from a credible source caught the attention of nearly 40% of the recipients. This compares to 31% who recalled the Family Fishing Guide in

the 2005 marketing program. However, the recall of the biologist's letter was skewed towards the renewal group, which makes sense because this group is comprised of anglers who are more active, and thus may seek information that will help them improve their success. It might be expected that the 2005 recruits would also be seeking information to enrich their fishing experiences as well. This was not the case as this group had a recall rate for the letter below that of the lapsed angler group and may reflect a lack of interest or commitment to fishing. Additional research into the information needs and constraints experienced by new recruits would likely shed some needed light on this group of anglers.

The mail survey results generally supported those of the license sales database analysis. Because the mail sample was a subset of anglers in the 2005 renewal, 2005 lapsed and 2005 recruit groups, the mail survey results are not directly comparable to the overall license buying groups. However, it is clear that the survey respondents were aware of the advertising and direct mail activities. The limitations of sample size restricted the depth of the analysis of the mail survey data, but the results showed that overall recall of advertising and direct mail were related to increased license sales.

The focus of the marketing program on providing information on fishing opportunities continues to be a strong strategy. The importance of fishing with family and friends and having quality fishing locations nearby were clearly apparent from the mail survey data. The only addition to these messages might be to further reinforce the benefits of family fishing and urge lapsed anglers to set aside time in the outdoors for fishing. Designing effective strategies for addressing the perceived constraint of time should be given careful deliberation.

An analysis of license sales at the end of the year is clearly needed because of the decline in sales through July of 2006, a period when 80% of licenses are sold. It may result in some additional understanding of the decline particularly when compared to sales in 2004 and 2005. This analysis may also uncover any extended effects of the marketing program that persisted through August or September when sales typically drop off sharply.

It is very clear from the data in Table 3 that the marketing program did not affect all subgroups of license buyers within the renewal and lapsed groups equally. The greatest benefits of the marketing program were received from those anglers with a longer buying history. Future marketing efforts strategically directed at these groups may yield greater benefits to the IDNR.

Recommendations and Next Steps

- ◆ A complete analysis of license sales for the entire 2006 year should be undertaken to determine if sales declines continued through the August – December period. Also, any further residual effects of the marketing program could be identified.
- ◆ The 2007 marketing program should, at least in part, include all three groups similar to the 2005 renewals, 2005 lapsed and 2005 recruits. Future marketing efforts directed at those anglers with a longer buying history may yield greater benefits to the IDNR.
- ◆ Further analysis of license purchases, focusing on age and purchase history, may result in refinements that yield greater efficiency and improved results in the future. Additional

research on new recruits would be helpful in better understanding their information needs and help define relevant messages.

- ◆ The program should also be executed with low license sales impact activities eliminated and additional activities developed to address the needs of all three buying groups.
- ◆ The use of direct mail to communicate with recently lapsed anglers should continue and be expanded with those groups and subgroups that responded favorably.
- ◆ Future evaluation designs should contain a group that receives the direct mail only without exposure to advertising to better isolate the effects of both direct mail and advertising.
- ◆ Continued use of direct mail in combination with advertising should be considered. Future marketing programs should be designed to isolate the independent and interactive effects of direct mail and advertising on different subgroups of anglers. Insights from this research may lead to new insights and efficiencies for future programs.

Appendix A: Mail Survey Questionnaire

July 15, 2006

Dear Fellow Iowan:

You are one of a small number of people in your community we are asking for views concerning fishing and Iowa's water resources. The purpose of this survey is to help us better meet your outdoor-related recreational needs, and the needs of Iowans.

Your responses to this survey are important, so please complete all sections that apply to you. You were randomly selected for our survey, and your responses represent those of many other Iowans in your local area. Please help us improve outdoor recreation opportunities for everyone by completing this questionnaire and returning it in the postage-paid envelope provided.

Please understand that your participation in this survey is voluntary. Be assured that your responses will be kept confidential.

To thank you for taking the time to help us improve the services we provide to fellow Iowans, we will enter your name into a drawing for a \$100 gift certificate to the DNR's Nature Store for free apparel. Plus, the first 500 respondents will receive a free subscription to the *Iowa Conservationist* magazine, just for returning this survey. We would greatly appreciate your completed survey to be mailed back to us by July 30, 2006.

Sincerely,



Jeffrey R. Vonk
Director

Return this survey and:
Receive a free, one-year subscription to the
Iowa Conservationist magazine!
(first 500 respondents only)
PLUS
You will become eligible to win a

WALLACE STATE OFFICE BUILDING / 502 EAST 9th STREET / DES MOINES, IOWA 50319
515-281-5918 TDD 515-242-5967 FAX 515-281-6794 www.iowadnr.com

How you feel about fishing opportunities in Iowa is very important to us. We want to understand how satisfied you are with fishing in Iowa. Your responses will remain anonymous and confidential.

1. How many times during 2006 have you gone fishing in Iowa? _____ times

2. How would you describe your feelings about the following aspects of fishing in Iowa?
(Please circle one number for each statement)

- | | Strongly Disagree | Strongly Agree |
|------------------------------------------------------------------------|-----------------------------|----------------|
| a) I know good places to fish in the area | 1.....2.....3.....4.....5.. | |
| b) I know effective techniques to catch different types of fish | 1.....2.....3.....4.....5.. | |
| c) I usually catch enough fish to satisfy me when I fish in Iowa | 1.....2.....3.....4.....5.. | |
| d) I am satisfied with the size of the fish I catch in Iowa | 1.....2.....3.....4.....5.. | |
| e) I know places where I have shoreline access for easy fishing | 1.....2.....3.....4.....5.. | |
| f) I can easily find information on fishing areas in Iowa | 1.....2.....3.....4.....5.. | |
| g) I can easily find information on how to catch fish in Iowa..... | 1.....2.....3.....4.....5.. | |

3. How important are each of the following in **preventing** you from fishing or fishing more often?

- | | Not at all | Somewhat | Very Important |
|--------------------------------------------------------|---------------------------|----------|----------------|
| a) Family commitments | 1.....2.....3.....4.....5 | | |
| b) Work commitments | 1.....2.....3.....4.....5 | | |
| c) Rather spend time on other leisure activities | 1.....2.....3.....4.....5 | | |
| d) Water is too polluted for fishing..... | 1.....2.....3.....4.....5 | | |
| e) Don't know <i>how</i> to fish | 1.....2.....3.....4.....5 | | |
| f) Don't know <i>where</i> to fish | 1.....2.....3.....4.....5 | | |
| g) Don't think the fish I catch are safe to eat | 1.....2.....3.....4.....5 | | |

4. Where do you currently receive fishing information? (insert options)

- By word of mouth from friends, family and others
- From *Iowa Game & Fish* magazine
- Visit DNR web site
- Receiving regular e-mails from the DNR containing this information
- Read in the newspaper or a magazine
- Receive in the mail
- DNR's Iowa Conservationist magazine
- Obtain from local retailer such as a tackle and bait shop

5. Which method of receiving this information would be most helpful to you? (*Check all that apply*)

- Visit DNR web site
- Receiving regular e-mails from the DNR containing this information
- Read in the newspaper or a magazine
- Receive in the mail
- DNR's Iowa Conservationist magazine
- Obtain from local retailer such as a tackle and bait shop

6. How beneficial would it be to receive information from the DNR about tips for catching fish and best places to go in your local area? (*Check only one*)

- Not at all beneficial Somewhat beneficial Very beneficial

We recently conducted a public awareness campaign about fishing in your community. We would like to know if you saw or heard any of this information.

7. Do you recall seeing or hearing about any of the following items in the past two months? (*Please check all that apply.*)

- DNR letter mailed to my home
- "Take Me Fishing" radio ads
- Family fishing events at state or city parks
- Information at Wal-Mart or other store
- Local Park and Recreation Guides
- No, I didn't notice any of this advertising

8. During the past two months did you notice any advertising specifically promoting fishing? (*Please check all that apply.*)

- No, I didn't notice any of this advertising (*Please go to Question 11.*)
- Yes, in magazines
- Yes, on television
- Yes, on the radio

9. Did you see or hear fishing advertising that includes a child asking to, "take me fishing?"

- No (*Please go to Question 11.*)
- Yes (*Continue with Question 9.*)

10. Did any of this fishing information influence you to go fishing or buy your license? (*Please check only one.*)

- Yes
- No
- I already had a 2006 fishing license

We recently sent many lowans a DNR letter about fishing.

11. Do you recall receiving the *letter*?

- No, I don't recall receiving the letter. *(Please skip to Question 15.)*
- Yes, I remember receiving the letter. *(Please continue with Question 13.)*

12. How useful did you find the information in the letter? *(Please circle one number.)*

Not at all Useful 1 - - - - - 2 - - - - - 3 - - - - - 4 - - - - - 5 **Extremely Useful**

13. Did you notice and/or use any of the following in the letter? *(Please check all that apply.)*

	Did Not		
	Notice	Noticed	Used
Suggestions on best places to fish locally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tips for successfully catching different types of fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visit the DNR web site for fishing information and prize offer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maps of local locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invitation to family fishing event	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Did this *letter* influence you to buy a fishing license this year? *(Please check one.)*

- No, it did not influence me to buy a license.
- Yes, it did influence me to get a license.
- I already had a 2006 fishing license.

15. To thank you for completing and returning this survey, you are eligible for a drawing for a \$100 Gift Certificate to the Iowa Nature Store (www.iowanaturestore.com), the DNR's outlet for Iowa outdoor apparel.

Please check the box below to be entered in the drawing.

- Please enter me in the drawing!** *(Please enter name and address below)*
- Do not enter me in the drawing.

Please provide your name, address, and email so we notify you if you win the drawing.

Name: _____ Email: _____

Address: _____

City, State, Zip: _____