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1986 Recreational Diving Activity in Michigan Bottomland Preserves

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Michigan Sea Grant Extension • Michigan Sea Grant College Program

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PREFACE

This study would not have been possible without the continuing efforts of many individuals and organizations around the state who coordinated survey distribution within each of the Michigan bottomland preserve areas. Special thanks go to the Alger Underwater Preserve Committee, Sea and Ski Scuba, George Tomasi, Pete Lindquist, Gary Snedeker, the Thunder Bay Underwater Park Committee, Thunder Bay Divers, Blue Water Charter Service, Arnold Boat Works, Summit Sports, the Alpena Area Chamber of Commerce, Gary Decker, George Dunkelberg, Steve Romzek, Kathy Harmon, and Bill Ferguson. Thanks also to: Steve Stewart, Sea Grant Extension Agent; Mark Ash, Chippewa County Extension Agent; Mark Ash, Chippewa County Extension Agent; Mary Kostecki, Mackinaw County Extension Director; James Lempke, Alger County Extension Director; Bob Johnson, Huron County Extension Direction; and John Middleton, Alpena County Extension Director; who all played important roles assisting the many local people involved in this effort. Finally, recognition also must go to the dedicated efforts of the staff at the Michigan State University Travel, Tourism, and Recreation Resources Center who compiled and analyzed the data, and for critical review of this report.

INTRODUCTION

The recent designation of bottomland preserves in Michigan Great Lakes waters has created the potential for enhanced recreational diving opportunities around the state. Many communities in preserve areas have begun to capture this potential by developing services and facilities for divers, and marketing these opportunities to prospective diver tourists (Kinnunen, et.al., 1986). Continuing to develop and promote recreational diving opportunities will require information on Great Lakes divers and their activity patterns in the preserves. Unfortunately, this information has only recently become available (Holecek, et.al., 1980; Kinnunen, 1985; Kinnunen, 1986; and Peterson, 1985).

In an attempt to better document diving activity in Michigan bottomland preserve areas, Michigan Sea Grant Extension conducted survey work in the four existing and one proposed (Whitefish Point) preserve areas during the summer of 1986. The purpose of this effort was to document preserve diver activity across the state and to provide data on this activity which local preserve interests could apply to their future marketing and development efforts.

One common survey instrument was used in all the areas, a copy of which can be found at the end of this report. Diver travelling groups were surveyed, with one member of the group filling out a survey. The surveys were distributed on-site to respondents through local dive charters, dive shops, marinas, and lodging establishments. Because charter operators were in the most effective position to survey visiting divers, the results are probably somewhat biased toward divers who used charter services. Local resident divers and visiting divers using private boats are probably underrepresented.

RESULTS AND DISCUSSION

This report summarizes statewide survey data collected during the 1986 diving season. A total of 372 completed surveys were collected, with the responses by preserve area shown in Table 1. As seen, the majority of surveys were collected in the Alger and Thunder Bay preserves, which are also the areas most developed and currently attracting the most divers. (Readers should note that separate reports also summarize data from the Alger Preserve (Kinnunen, et.al., 1987) and from Thunder Bay (Peterson, et.al., 1987).)

Table 1 Survey Responses By Preserve Area

<u>Preserve</u>	<u>Survey Responses</u>	<u>Percent</u>
Alger	200	53.8
Thunder Bay	120	32.2
Whitefish Point	27	7.3
Straits of Mackinac	17	4.6
Thumb Area	8	2.1
	372	100

First-Time/Repeat Visitors

First-time visitors to the preserve areas comprised 61.3% of the respondents. This high percentage is most likely a function of the "youth" of the preserve concept in Michigan, with the first preserves (Alger and Thunder Bay) having been designated in 1981. Furthermore, although diving activity was present in all these areas before designation, active development and promotion of these areas has only taken place since designation. Finally, the high percentage of first-time visitors indicates that local promotional efforts seem to be successfully attracting new diver tourists to these locations.

Length of Stay

The average length of stay in preserve areas for all travel parties surveyed was 2.9 days. A breakdown of length of stay responses is presented in Table 2.

Table 2 Length of Stay

<u>Length of Stay</u>	<u>Percent Staying</u>
1 Day	12.2
2 Days	40.9
3 Days	27.9
4 Days	10.2
More Than 4 Days	8.8
Average for all respondents--2.9 Days	

There are also some significant length-of-stay differences between different types of travel groups. Out-of-state visitors stay an average of 3.5 days, compared to 2.4 days for divers from Michigan. Although there is no significant length-of-stay difference between first-time (2.88 days) and repeat visitors (2.96 days) for the state, length-of-stay differences for these groups exist in individual preserve locations. In Thunder Bay, for instance, first-time visitors averaged 2.6 days, compared to 3.3 days for repeat visitors.

Accommodations

Analysis of data on accommodations used by preserve divers across the state shows that visiting divers tend to stay in motels or camp, with lesser numbers using other lodging alternatives. Most preserve visitors are also staying overnight, as seen by the small percentage (6.9%) indicating that they were not staying.

Table 3 Accommodations Used

<u>Accommodations</u>	<u>Percent Using</u>
Cabins	2.1
Second Home in Area	2.6
Staying on Boat	4.1
Not Staying Overnight	6.9
Family/Friends	7.5
Camping	31.7
Motel	45.1

Further analysis of accommodation use by first-time/repeat visitors shows that there are some important differences. This data is presented in Table 4. The majority of first-time visitors (53.4%) stay in motels. By contrast, repeat visitors tend to use motels less (32.2%), and utilize other lodging alternatives in the area. This may be because, as repeat visitors, they have become more familiar with the area and seek out these other alternatives.

Table 4 Accommodations Used By First-Time and Repeat Visitors

<u>Accommodations</u>	<u>First-Time (%)</u>	<u>Repeat (%)</u>
Rental Cabins	1.7	2.6
Second Home in Area	2.1	3.3
Staying on Boat	2.5	6.6
Not Staying	5.9	8.5
Family/Friends	5.1	11.2
Camping	29.2	35.5
Motel	53.4	32.2

Persons Accompanying Divers

Survey respondents were asked how many people accompanied them on their trip, and how many non-divers were in their travelling group. The average travel party across the state was comprised of 6.1 people, with 1.2 non-divers. Group sizes ranged from 1 to 38 people, with 0 to 15 non-divers in the travelling group. Such party sizes are an indication that dive travel is often a group/club activity.

Diving Mode

Dive charters were used by 53.3% of the divers in Michigan preserves in 1986. Divers used private craft 30.3% of the time, rental craft 7.4% and 8.9% of the divers participated in shore diving.

When first-time and repeat visitors are analyzed, we see some important differences. Table 5 shows the diving mode used by first-time and repeat visitors across the state in 1986. Most first-time visitors use charter services (57.9%). By contrast, repeat visitors still rely on local charter services; but a significantly greater percentage (44.9%) are using private craft to access dive sites. This again suggests that familiarity with an area leads repeat visitors to "go their own way".

Table 5 Diving Mode Used By First-Time and Repeat Visitors

<u>Diving Mode</u>	<u>First-Time (%)</u>	<u>Repeat (%)</u>
Charter Services	57.9	46.1
Private Craft	21.1	44.9
Rental Craft	10.1	3.2
Shore	10.9	5.8

An examination of diving mode by accommodations used by visitors demonstrates different visitor segments in bottomland preserves. From Table 6, it can be seen that the largest segment (31.0%) of visitors are charter divers using motels. From prior discussion of accommodations and diving mode, and first-time preference for both; it is probably safe to say that the majority of charter/motel divers are first-time visitors. As shown, other significant segments are charter/campers, private craft/campers, and private craft/motel visitors.

Table 6 Diving Mode By Accommodations Used By Visitors (Percent)

<u>Accommodations</u>	<u>Charter</u>	<u>Private Craft</u>	<u>Rental Craft</u>	<u>Shore</u>
Motel	31.0	8.6	2.1	2.9
Camping	14.8	11.2	2.4	3.8
Family/Friends	3.6	3.1	0.5	0.2
Not Staying Overnight	2.6	1.9	1.7	0.2
Staying on Boat	0.2	3.8	0	0
Second Home In Area	0.7	0.7	0	1.0
Rental Cabins	1.4	0	0.5	0.5

Information Sources

Survey respondents were also asked how they first learned about diving in the area. Responses to this question can be a means of evaluating current marketing efforts and planning future ones. Table 7 presents information sources used by all respondents across the state, including first-time and repeat visitors. Because marketing efforts vary greatly among preserves, readers are encouraged to examine data in Kinnunen, et.al., 1987 and Peterson, et.al., 1987. These reports discuss the effectiveness of differing promotional efforts in the Alger and Thunder Bay preserves in more detail.

Table 7 Information Sources First Used By Visitors

<u>Information Source</u>	<u>All Respondents (%)</u>	<u>First-Time (%)</u>	<u>Repeat (%)</u>
Other Divers	55.0	53.7	57.0
Dive Club	24.9	22.0	29.6
Charter Operator	14.4	14.5	14.1
Diving Trade Show	7.2	8.8	4.4
Preserve Brochure	6.9	9.3	4.4
Advertisements	6.1	7.5	3.7
Dive Shop	4.7	5.3	3.7
Other	6.1	6.6	5.2

(Totals more than 100% due to multiple responses)

As seen in Table 7, "word-of-mouth" information from other divers and through dive clubs are both very important first sources of information. Charter operators, who typically are the most active in local promotional effort, are also important information sources. Although differences between first-time and repeat visitors are not that great, first-timers do seem to be using trade shows, brochures, and advertisements as information sources more than repeat visitors. Also, many of the repeat visitors (29.6%) were first informed through a dive club, indicating that this has been a significant information source prior to more recent, organized promotional efforts.

The manner in which in-state and out-of-state visitors learn about diving in an area also differ. Table 8 presents this information. Again, "other divers" are the primary source of information for both categories. For in-state divers, the informal network of dive clubs plays a significant role, with charter operators following.

Table 8 Information Sources First Used By In-State and Out-Of-State Visitors

<u>Information Source</u>	<u>In-State (%)</u>	<u>Out-of-State (%)</u>
Other Divers	53.3	56.7
Dive Club	28.9	20.1
Charter Operator	12.7	16.5
Diving Trade Show	4.1	11.0
Preserve Brochure	7.6	6.1
Advertisements	6.6	5.5
Dive Shop	2.0	7.9
Other	5.6	6.7

(Totals more than 100% due to multiple responses)

Out-of-state divers also used these same sources, although dive clubs were less significant sources than for in-state divers. The major differences were for the trade show and dive shop responses. People from the Alger and Thunder Bay preserves have worked out-of-state trade shows and cultivated relationships with out-of-state dive shops. That these methods also received high percentages seems to indicate that they are marketing tools which do attract out-of-state visitors.

Diver Residence

Michigan residents comprised 55% of the survey respondents. Survey respondents came from forty Michigan counties, fourteen states, and Ontario. This information is presented in Table 9 and demonstrates that the minimal marketing efforts of preserve interests are still drawing diver visitors from a large geographic area. In fact, 50.7% of the first-time respondents were from out-of-state.

Table 9 Diver Residence

<u>Residence</u>	<u>(Percent of Total Respondents)</u>	
MICHIGAN		55.0
Oakland County	10.0	
Wayne	7.0	
Macomb	4.3	
Lapeer	4.3	
Saginaw	3.0	
Ingham	2.7	
Kent	1.9	
Genesee	1.9	
Other Counties	19.9	
OUT-OF-STATE		45.0
Wisconsin	12.7	
Ohio	8.1	
Illinois	7.5	
Minnesota	5.7	
Indiana	3.8	
Iowa	2.1	
Ontario	1.9	
Kentucky	1.1	
Other U.S. (Rhode Island, New York, Colorado, California, Kansas, North Dakota, Wyoming)	2.1	

Month of Visitation

Diving activity by month for survey respondents is shown in Table 10. Since this survey was administered only during the six months shown, some visitors to Michigan preserves during 1986 may have been missed. These months do constitute the vast majority of the dive season, however.

Table 10 Diving Activity By Month

<u>Month</u>	<u>Percent of Respondents</u>
May	5.4
June	18.0
July	33.9
August	32.8
September	8.1
October	1.9

Diver Attitudes Toward Area

Respondents to the survey were also given the opportunity to express what they liked most or least about the particular preserve area which they were visiting. These comments are summarized below for each area. Please note that these are general categories compiled by the authors which group specific comments made by respondents. These questions were included to elicit the qualitative perceptions of visitors to the area. Although the number of responses for a particular category may be low, these opinions are nonetheless important measures of actual experiences. They also demonstrate the uniqueness of each preserve area as perceived by the divers who responded.

Diver Perceptions of Straits of Mackinac Preserve

<u>Like Most</u>	<u>N</u>	<u>Like Least</u>	<u>N</u>
Quality of Shipwrecks	7	No Dive Services (Air, Shop, Charters)	4
Good Diving	4	Distance from Home	3
Variety of Recreation Activities	3	Attitude of Dock Personnel Toward Divers	2
Natural Beauty, Scenery	3	Weather, Water Temperature	2
Mackinaw Island	2	Wrecks Not Marked	1
Geological Formations	1	No Diving Information	1
		Commercial Development	1

Diver Perceptions of Alger Preserve

Like Most	N	Like Least	N
Good Diving	52	Cold Water	23
Scenery/Beautiful Area	40	Bad Weather	17
Clean Water	36	Long Distance	15
Shipwrecks	33	Nothing	10
Friendly	16	Insects	5
Everything	11	Not Enough Shipwrecks	4
Diving on Smith Moore	8	Access	4
Other Outdoor Activities	7	Lack of Other Activities	3
Good Restaurants	6		
Waterfalls	4		
Other Sites	4		
Accessibility of Shipwrecks	4		
Rock Formations	4		
Calm Waters	4		

Diver Perceptions of Thunder Bay Preserve

Like Most	N	Like Least	N
Shipwrecks	19	Weather	14
Friendly People	16	Distance from Home	7
Service of Charters	13	Services (Lodging, Dining)	3
Variety of Wrecks, Dive Sites	13	Lack of Gas - Early or Late	2
Water Clarity	11	Few Sheltered Dive Sites	2
Marked, Accessible Dive Sites	6	Lack of Camping on Lake	2
Clean, Relaxing Area	6	Lack of Entertainment	1
Natural Beauty	5		
Services (Lodging, Dining)	4		
Boating Facilities	3		
Distance from Home	2		

Diver Perceptions of Thumb Area Preserve

Like Most	N	Like Least	N
Quality of Wrecks	4	No Charter Services	3
Dunderberg, Philadelphia	3	Most Wrecks Too Deep	2
Natural Beauty	2	Poor Visibility	1
Close to Home	1	Wrecks Not Buoyed	1

Diver Perceptions of Whitefish Point Area

Like Most	N	Like Least	N
Quality of Wrecks	9	Insects, Bugs	6
Water Clarity	8	No Diving Information	3
Scenery, Rustic Character	6	Too Many Divers	2
Natural Attractions	5	Weather	2
Diving	4	Stripping of Wrecks	1
Local History	2	Local Charter Services	1
Museum	1	Distance from Home	1
Friendly People	1	Lodging Prices	1

CONCLUSIONS AND FUTURE NEEDS

Recreational diving activity in Michigan bottomland preserves has become a significant element of the Michigan tourism economy. With the initial development and promotion undertaken by local individuals and businesses, these areas are proving to be destination attractions for first-time visitors from Michigan and the Midwest. The market potential of the preserves is just beginning to be realized. Growth in the future will be closely related to the enhancement of visitor services, better targeted marketing efforts, and development of preserve management programs.

The need for active preserve management programs has been documented (Holecck, et.al., 1982). As increased numbers of visitors are drawn to the preserves, these management issues will become even more important. Diver safety procedures, diver services, marking of dive sites, and diver information are available in some, but not all of the preserves. Resource inventories, facilities planning and development, education/information programs, law enforcement, funding sources, and on-site management staff have yet to be addressed in any of the preserve areas. Addressing these considerations will require a wide range of cooperative efforts which draw on the diverse resources of state agencies, businesses, tourism organizations, units of government, and the diving community.

Capturing the economic potential of recreational diving in Michigan preserves will also depend on effective marketing efforts. At this point, the largest segment of preserve visitors are charter/motel divers. It should also be recognized that there are many other visitor segments, all of whom desire different services and information when visiting an area. Campers, private craft divers, and large groups all have different service and information requirements.

A key aspect of promotional efforts targeted toward these segments will be the ability to provide a complete picture of services, recreation opportunities, and events in the area. Today's tourist wants timely, accurate information with which to make their travel decision. Such information may be especially important to non-divers interested in joining their diving family or friends for a trip.

Packaging of dive travel for the different user segments may be an effective means of promotion, particularly for the larger family/social/club groups which are typical of dive travel. There may be greater opportunities to package cabin lodging arrangements for extended stay parties for example. Including additional activities in packaged dive tours (charter fishing, diving-related seminars, discounts on local entertainment alternatives) may also be effective. Packaging of dive travel to more than one preserve location might be another effective marketing strategy, particularly for out-of-state divers who wish to maximize their vacation time. If cooperative advertising and business arrangements could be developed, a tourist diver might be very receptive to a week-long package of diving in two or three Michigan preserve areas.

The importance of word-of-mouth promotion should also not be overlooked. Skin Diver magazine, for instance, has documented that over 70% of their readers offered advice on a diving location to an average of 6 people (Skin Diver, 1987). With this kind of impact, it is critical that visitors to Michigan preserves have a quality experience. A quality experience is the best advertising for generating the always important repeat visit. Many of the survey respondents commented positively on their time spent in the preserve areas. And, as evidenced above, these satisfied visitors will likely make positive travel recommendations to family and friends.

State-level marketing of Michigan preserve diving should also receive greater emphasis. Recreational diving should be given greater visibility in the "YES MICHIGAN" program. Although each preserve area possesses unique attractions and services and should market them, it is still important that potential preserve visitors begin to hear that Great Lakes diving in Michigan is an alternative to other popular diving destinations. Hopefully, the recently formed Michigan Bottomlands Preserve Council (MBPC), which is a council representing preserve interests, can begin to promote a statewide perspective and jointly market Michigan preserve diving. With Michigan Travel Bureau assistance, the MBPC should formulate marketing approaches which promote all Michigan preserves. In particular, the longer staying out-of-state divers should be targeted through dive trade shows and the network of dive shops and dive clubs throughout the Great Lakes region. All of these have been shown to be effective means of reaching new out-of-state diver visitors. Advertising outlets in diving publications should also be explored as a means of reaching the national diving community.

Finally, as marketing efforts are undertaken, they also should be evaluated. The preserve concept is new and growing fast. Given continued development of these areas and enhancement of visitor services, Michigan bottomland preserves as a tourism product could change dramatically in coming years. Marketing approaches should reflect this evolution. Their effectiveness should be continuously re-evaluated, and designed to accommodate future changes in the tourism products offered in Michigan bottomland preserves. Any future marketing efforts should also reflect changes in visitor travel preferences and activity patterns as well.

LITERATURE CITED

Holecek, Donald F., and Susan J. Lothrop. 1980. Shipwreck vs. Nonshipwreck Scuba Divers: Characteristics, Behavior, and Expenditure Patterns. Michigan Sea Grant College Program #MICHU-SG-80-205.

Holecek, Donald F., and E. Thomas Smiley. 1982. Management Guidelines For Michigan's Great Lakes Bottomland Preserves. Michigan Sea Grant College Program #MICHU-SG-82-201.

Kinnunen, R. J. 1985. 1984 Alger Underwater Preserve Diver Information Survey Results, Expenditures, and Secondary Economic Impacts. Alger Underwater Preserve Committee, Inc..

Kinnunen, R. J. 1986. 1985 Alger Underwater Preserve Diver Information Survey Results, Expenditures, and Secondary Economic Impacts. Alger Underwater Preserve Committee, Inc..

Kinnunen, R., J. Peterson, S. Stewart, and C. Swinehart. 1986. "Sea Grant Research and Community Development Make Michigan's Bottomland Preserves a Reality". Marine Parks and Conservation: Challenge and Promise. National and Provincial Parks Association of Canada.

Kinnunen, R., J. Lempke and T. Sundstrom. 1987. Behavior Patterns of Divers Visiting The Alger Bottomland Preserve. Michigan Sea Grant College Program "MICHU-SG-87-505.

Peterson, J. 1985. Thunder Bay Underwater Preserve Diver Survey Results. Thunder Bay Underwater Park Committee.

Peterson, J. and T. Sundstrom. 1987. A Profile of 1986 Diver Activity in the Thunder Bay Bottomland Preserve. Michigan Sea Grant College Program "MICHU-SG-87-507.

_____. 1987. "1987 Subscriber Survey". Skin Diver magazine.

ALGER UNDERWATER PRESERVE
DIVER INFORMATION SURVEY



In order to effectively plan for the future development of the Alger Underwater Preserve, it is important that we learn more about the divers who are enjoying its diving attractions. We would appreciate your assistance by taking a few minutes to complete the following form.

Thank you.

Alger Underwater Preserve Committee, Inc.

Date: _____

Is this your first diving trip to the Munising Area? Yes No

How many days do you plan to stay in the area? _____

Local accommodations:

Not staying overnight	<input type="checkbox"/>	Camping	<input type="checkbox"/>
Motel/Hotel	<input type="checkbox"/>	Family/Friends	<input type="checkbox"/>
Rental Cabins/Cottages	<input type="checkbox"/>	Own second home	<input type="checkbox"/>

How many persons accompanied you on this trip? _____

How many non-divers accompanied you on this trip? _____

I will dive from:

Charter boat	<input type="checkbox"/>	Rental craft	<input type="checkbox"/>
Private craft	<input type="checkbox"/>	Shore	<input type="checkbox"/>

How did you first learn about diving in this area?

Other diver(s)	<input type="checkbox"/>	Dive Club	<input type="checkbox"/>
Charter operator	<input type="checkbox"/>	Trade show	<input type="checkbox"/>
Paper/magazine ads	<input type="checkbox"/>	Preserve brochure	<input type="checkbox"/>
Other (please specify)	_____		

Where is your permanent residence located:

_____ CITY STATE OR PROVINCE ZIP CODE

What do you like most about this area?

What do you like least about this area?

Please fill out if you are willing to provide additional information.

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____