

LINKING RESEARCH, LEGAL MANDATES AND PUBLIC INPUT TO UPDATE MICHIGAN'S ORV PLAN

Charles M. Nelson, Associate Professor
Department of Community, Agriculture, Recreation and
Resource Studies
131 Natural Resources Building
Michigan State University
E. Lansing, MI 48824
nelsonc@msu.edu
(517) 432-0272 (Office) (517) 432-3597 (fax)

Robin McCoy
Graduate Student, Michigan State University

Abstract

Michigan's only off-road vehicle (ORV) plan was written in 1979. Since then, ORV use and users have changed considerably. Michigan now has a 3,100 mile designated ORV trail system where there was no significant designated system in 1979. ORV licenses have increased from less than 100,000 in the mid-1990s to 175,000 in 2004. Public land ORV use in the Lower Peninsula is allowed only where posted open for ORVs on state and national forest trails and routes and at two parks. In the Upper Peninsula, ORVs may be ridden on public forest roads and trails not posted closed to ORVs. There was an estimated 4.2 million annual ORV use days in 1999. The plan update benefits from past research, public input and current surveys of key stakeholders and resource managers and regulators. The plan is designed to meet legal mandates to protect state resources from pollution or impairment while providing an integrated forest recreation system. Key draft recommendations include expanding the trail system, more aggressively identifying and restoring ORV caused environmental damage on public lands, involving county sheriffs in ORV safety education and increasing per mile reimbursement rates for ORV trail maintenance cooperators. The draft plan will undergo public review in summer 2005.

1.0 Introduction

This paper describes the process and substance of Michigan's ORV plan update as presented to a 2005 NERR Management Roundtable. ORVs are defined by law as motor vehicles capable of cross-country travel without the benefit of a road or trail. They include

motorcycles, all-terrain vehicles (ATVs), larger multi-wheeled or tracked vehicles, dune buggies and full size trucks and sport utility vehicles. The legislature delegated primary ORV management responsibility to the Michigan Department of Natural Resources (DNR). By legal mandate, this plan must integrate ORV management with the DNR's core mission to conserve, protect and provide for public use and enjoyment Michigan's natural resources for current and future generations.

2.0 Planning Process

The process began with a proposal by the senior author to update Michigan's ORV plan. Once accepted, the process publicly began with a presentation to the Michigan ORV Advisory Board, a seven member panel appointed by the DNR director to provide advice and input to the DNR on ORV matters, in May 2004. Since then there has been significant public involvement through three geographically distributed public information meetings, workshops with ORV trail maintenance and environmental restoration grant recipients, opportunities for written comment and mail surveys of Michigan county sheriffs, northern Michigan road commission managers and ORV coordinators from the other 49 states. Also, two meetings were held with DNR field personnel and one with the management team of the Forest, Mineral and Fire Management Division, the lead DNR division in ORV planning and administration. Finally the author reviewed legislative history and research concerning ORV use and users in Michigan and elsewhere.

3.0 Findings

Michigan's only formal ORV plan was published in 1979. That plan recommended minimizing social conflict, meeting outdoor recreation needs and protecting environmental integrity by confining ORV use on state public lands to the state forest roads and a system of designated ORV trails, routes and areas sited Michigan state forests and the lands of willing partners. It noted the need to have ORV riding facilities available to the public in southern Michigan where there were (and are) no state forest lands. Subsequently, the legislature, through

passage of Public Act 17 of 1991, further restricted the use of ORVs on Lower Peninsula public lands only to designated trails, routes and areas, closing undesignated forest roads to ORV use. This provided a “closed unless posted open” system in the Lower Peninsula, where 96 percent of the state’s population resides. However, in the Upper Peninsula, the use of unsigned forest roads was allowed unless ORVs were prohibited by signage. This provided an “open unless posted closed” system.

The rationale discussed at the public hearings for the difference in approach is the reduced opportunity for social conflict in the Upper Peninsula based on the small population and large proportion of public and forest products industry ownership.

3.1 Current ORV System

Today, there are 3,100 miles of signed, designated ORV trail and route in Michigan, with 73 percent on state forest lands, 14 percent on national forests and 13 percent on county or state roads for street legal motorcycles as part of the Michigan Cross Country Cycle Trail. Of the system not on county roads, 40 percent is 24 inches wide (at ground surface) motorcycle trail, 43 percent is 50 inches wide ATV trail (open to ATV and cycle use) and 17 percent is 72 inches or greater in width ORV route (open to all types of ORVs). In addition, thousands of miles of state and national forest roads in the Upper Peninsula are open for ORV use. There are five major scramble areas, encompassing more than 2,000 acres. Two are on state forests (St. Helen’s Motorsport Area and Black Lake Scramble Area), one at Silver Lake State Park, one at Bull Gap in the Huron National Forest, and one at The Mounds, a Genesee County Park.

3.2 ORV Use and Users

ORVs were initially required to be registered in 1975 and 3-year registration of resident machines with the Michigan Secretary of State was mandatory until 1991. Public Act 17 of 1991 shifted to a system of annual ORV licensing through the DNR of all ORVs operated on Michigan public lands or waters, regardless of one’s state of residence. In the 2003-04 license year there were 174,651 Michigan licensed ORVs. This is a 124 percent increase since the first year when all ORVs had to be licensed in 1994-95.

There have been three statewide studies of Michigan ORV use and users: 1977, 1989 and 2000 as well as a trends analysis (Nelson and Lynch 2001). The most recent (Nelson et al. 2000) estimated that for the approximately 125,000 licensed ORVs at the time, each was used an average of 34 days in Michigan during a 12-month period in 1998-99. This amounted to 4.2 million annual ORV uses. Of those uses, 44 percent were on private lands, 25 percent were on public or private lands exclusively to support hunting or fishing and 31 percent were on public lands with 88 percent of that public land riding on the designated trail system. If current annual use levels per licensed ORV are similar to 1998-99 and extrapolated to today’s number of licensed ORVs (approximately 175,000), this suggests there are 6.0 million ORV use days annually, with over 1.6 million on the designated ORV system, or approximately 1,900 uses annually per mile.

3.3 Michigan’s Current ORV Program

The ORV program in the DNR is administered through the Forest, Mineral and Fire Management Division (FMFM) and its sister divisions Law Enforcement and the Office of Contracts, Grants and Customer Service. Public Act 17 of 1991 established the ORV Trail Improvement Fund (a restricted fund with carry-over authority) to accomplish key ORV program tasks through a grants approach. The program is fully user-pay funded through the annual \$16.25 ORV license required for each ORV used on the public lands or waters of Michigan. Revenue per license is apportioned:

- Twenty-five cents to the license agent
- One dollar to ORV safety education (ORV Safety Education Fund); partners include county sheriffs, non-profits
- Of the remaining \$15 (ORV Trail Improvement Fund)
 - ◆ Not less than 50 percent to trail maintenance and development; partners include non-profits, DNR, Forest Service
 - ◆ Not less than 12.5 percent to restoring ORV damage to public lands; partners include DNR, Forest Service, non-profits

- ◆ Not less than 31.25 percent to ORV law enforcement; partners include DNR, county sheriffs
- ◆ Not more than 3.125 percent to administration
- ◆ Remaining 3.125 percent to either trails, damage restoration or enforcement

In 2003-04, ORV license revenue provided approximately \$2.8 for ORV program. None of the approximately \$1.0 million of state gasoline sales taxes annually generated by ORV use in Michigan (Nelson et al. 2000) is appropriated to the ORV program, although such appropriation was recommended by the initial ORV registration legislation (Public Act 319 of 1975).

3.4 Designated System Condition

An assessment by DNR field personnel with trail management responsibilities of 82 ORV trails/routes accounting for 2,705 miles of the designated trail system (did not include most of the Michigan Cross Country Cycle Trail, much of which is located on county roads for street legal motorcycles) showed that 67 percent of the mileage was in good shape (met trail maintenance standards over 95 percent of a trail or route's mileage), 31 percent was in fair condition (met standards on 75-95 percent of trail mileage) and 2 percent was in poor condition (met standards on less than 75 percent of mileage). This is an improvement from the last (1996) assessment (Lynch and Nelson 1997) when 61 percent was in good condition, 27 percent was in fair condition and 12 percent in poor condition. Key improvements needed include better brushing and signage and re-routes or boardwalks to protect against soil erosion or compaction in wet or steep areas.

Illegal uses were reported on 44 (54%) of the evaluated trails/routes. User made spur trails were the most common illegal use in the UP. In the LP there were a greater variety of illegal uses including illegal scramble areas and hill climbs, riding in wetlands or river/lake shorelines and riding non-street licensed ORVs on county and state roads, especially near campgrounds. A quarter of the trails had manager reported conflicts. These included conflicts between motorcycle and ATV riders on the designated ORV system, ORV riders and

non-motorized trail users on the designated ORV system and ORV riders and snowmobile trail groomers, graders and riders during the fall (just prior to snowmobile season) and during low snow periods in the winter.

3.5 ORV Fatalities and Safety

There is no single source for data regarding ORV accident and fatality statistics. The U.S.. Consumer Product Safety Commission (2003) reports that 1982-2002 there were a total of 224 ATV fatalities in Michigan. This does not cover off-road motorcycles or full size vehicles, nor 54 inch or 56 inch wide vehicles between ATVs and full-size vehicles. The Michigan State Police Office of Highway Safety Planning (2004) reported that 1994-2003 there were 2,528 ORV/ATV accidents on Michigan roadways, resulting in 77 fatalities. This apparently does not provide data regarding trails, private land use, etc.

3.6 ORV Safety Education

ORV safety education was transferred back to the DNR from the Department of Education in Public Act 111 of 2003. Records indicate that from 1998-2003, 12,156 youth received ORV safety certification. This is approximately 2,000 per year. The most recent statewide ORV licensee study suggested that 1/3 of youth 12-15 years old who rode a licensed ORV were certified and 1/6 of youth 10-11 years old who rode a licensed ORV were certified (Nelson et al. 2000). Currently DNR is not aggressively enforcing mandatory ORV safety certification for youth due to a lack of educational opportunities.

3.7 Public Comment and Opinion

During the 1989 and 2000 state-wide ORV registrant/licensee surveys (Nelson 1989; Nelson et al. 2000) respondents reported the one DNR action they felt would best improve the Michigan ORV program. In both studies, the most frequent response was providing more legal places to ride. Other top six suggestions noted in both studies were allowing the use of road shoulders by ORVs, improving trail maintenance and improving trail signage. In the most recent 2000 survey, the other two suggestions in the top six were reducing ORV license fees for those who only use their ORVs to fish or hunt and increasing ORV law enforcement.

In October 2004, three public information meetings were held to discuss the planning process and gather public input about future Michigan ORV management. The meetings were in Lansing (southern Lower Peninsula), Grayling (northern Lower Peninsula) and Marquette (central Upper Peninsula), with a total of 255 participants signing attendance sheets. After a brief overview of the planning process, all who wished to speak had an opportunity to provide input. Key themes across the meetings were:

- Support for designated long distance loop and point-to-point destination ORV trails to provide multi-day, tourism oriented riding opportunities
- Support for access from the designated ORV system to goods and services
- Support for additional riding opportunities targeted at specific vehicle types including vehicles between ATV and full-size)
- Support for continuing state forest roads open to ORV use in the UP and re-opening the state forest road system in the Lower Peninsula to ORV use
- Support for ORV program use of state gasoline sales tax revenue generated by ORVs
- More support for mandatory “hands-on” ORV safety education than a classroom oriented approach with optional “hands-on”

Only at the Marquette meeting did any presenters identify themselves as other than ORV riders. There, those people did not register opposition to the use of ORVs or of the designated system, but rather of trespass and damage to private property by ORV use. They advocated for increased law enforcement and challenged the ORV community to “clean up its act”. At the Grayling meeting, a number of riders suggested that the designated trail system be better maintained in regards to signage, grading and routing. In the Marquette meeting, grant sponsors and others wanted ORV signage compatibility with snowmobile programs (e.g. same size stop signs).

Additionally, 64 distinct individuals provided written input, including those who represented ORV organizations. A majority wanted to expand ORV riding

opportunity on public lands while a minority wanted to further restrict ORV use or keep it as it is. Their other points were similar to those provided in public input sessions.

In September 2004, two workshops were held with ORV grant recipients: trail maintenance and development and ORV damage restoration. At the trail maintenance and development workshop, some grant sponsors expressed concern that per mile reimbursement rates for maintenance did not equal costs. They noted that increased trail use was making maintenance more challenging and expensive. This was especially true if they hired workers to conduct manual labor. Other key concerns were that they strongly supported DNR sign regulatory sign plans for each trail to reduce their discretion and thus their liability in sign placement. Finally, they expressed concerns about the impact of timber harvest on the designated system by reducing trail challenge, mileage and increasing speeds through trail straightening.

Participants at the restoration workshop strongly supported maintaining DNR priorities for ORV damage restoration:

1. Reduce or eliminate erosion into any body of water
2. Restore damage in any designated roadless area, state natural river corridor or federal wild and scenic river corridor
3. Restore damage to aesthetically sensitive areas

However, they expressed concern at the slow pace of restoration. This concern focused on the need for a better system to identify ORV damage to public lands, the need to use practical soil erosion and revegetation techniques and a streamlined grant process. They also noted the need to involve a wider variety of organizations in damage restoration.

4.0 Draft Recommendations

The following draft recommendations were submitted to the Michigan DNR in December 2004. At the writing of the paper they are still involved in internal review. It is expected that they will undergo public review in summer of 2005.

4.1 Designated System

- Upgrade system to all trails/routes having maintenance rated as “good” (more than 95 percent of a trail’s mileage meets maintenance standards)
- Develop additional cycle and ATV trail and ORV route and scramble area with partner land managers to meet increasing demand
 - ◆ Destination point-to-point and loop routes
 - ◆ Parallel ATV or cycle trails in existing trail corridors of influence
 - ◆ Complete St. Helen’s Motorsport Area development plan
 - ◆ Develop one or more new scramble areas
- Use nationally recognized Forest Service standards for motorized trail signage
- Have no net loss of ORV trail quality and quantity from timber management
- Maintain “closed unless posted open” approach in Lower Peninsula
- Maintain forest roads open to ORV use without posting in the UP
- Encourage local units of government to target ORV use to selected county road shoulders to provide access to designated trail/route/area system
- Annually monitor the condition of the designated system using the 2004 assessment instrument
- Every 5 years conduct an assessment of ORV use and users

4.2 System Maintenance

- Increase the maximum rate of reimbursement to \$154 per mile for cycle and ATV trail maintenance and \$89 for ORV route maintenance while strictly enforcing maintenance standards
- Explore multi-year and competitive bid options for trail maintenance
- Open eligibility for trail maintenance grants to for-profit entities
- DNR to complete regulatory sign plan for each trail following Forest Service motorized trail standards

- DNR to provide ORV trailhead maintenance throughout snow free months

4.3 Enduro Motorcycle Events and Program Administration

- Locate events at sites of proposed timber harvest (1-2 years out)
- Clarify responsibilities and strengthen working relationships among DNR personnel/divisions involved in ORV program delivery
- Investigate streamlining grant processes to gain efficiency and cooperators

4.4 Damage Restoration

- Better and more systematically identify ORV damage on public lands
 - ◆ Broaden operations inventory to focus on full land stewardship mission
 - ◆ Seek partners and provide information conduits for reporting ORV damage
- More efficiently and effectively restore identified environmental damage
 - ◆ Use known techniques from agricultural erosion control and wildlife habitat restoration
 - ◆ Administer at the FMFM district level through recreation specialists

4.5 Law Enforcement

- Strengthen ORV enforcement by:
 - ◆ Fund additional MI Conservation Officer patrol hours at straight time
 - ◆ Fund additional sheriff patrol hours and reinstate ORV patrol equipment grants for eligible sheriffs
 - ◆ Forest Service becoming eligible to receive ORV enforcement grants for patrol
 - ◆ DNR State Parks (Silver Lake SP) becoming eligible to receive ORV enforcement grants for patrol
 - ◆ Involve Forest officers in ORV patrol at ORV trailheads to educate riders pre-ride and to provide safety checks
- Enforce ORV youth certification requirements after ORV safety education classes are available in a majority (42) of Michigan counties

4.6 Safety Education

- Follow a model similar to marine safety education for ORV safety education
 - ♦ County sheriffs are lead provider, educational and non-profit organizations can also provide
 - ♦ Classroom education mandatory with a focus on ORV safety and laws
 - ♦ Written, proctored exam mandatory
 - ♦ “Hands-on” training/test optional but encouraged
 - ♦ County sheriffs along with educational and non-profit organizations are eligible to apply to and receive ORV Safety Education Fund grants for costs associated with course up to \$20 per student
- ORV Safety Education required of anyone born on or after December 31, 1988 to ride an ORV on public lands or waters of Michigan
- DNR Law Enforcement Division to design and implement a system to track ORV fatalities patterned after current snowmobile fatality tracking system
- DNR comprehensive ORV safety education and training materials available on the internet at the DNR’s website

4.7 Licensing

- All ORV licensing should be done through the electronic license system
- All ORV license dealers shall provide a copy of the ORV rules and safety information to each licensee annually on their purchase of their ORV license

5.0 Conclusion

While the draft recommendations propose a number of fundamental changes requiring additional expenditures, unlike many other outdoor recreation management efforts, the Michigan ORV program has a fund balance of four million dollars as of the end of fiscal year 2003-04. This is a result of increased license sales over the past decade and appropriations not keeping pace. In

addition, some appropriated funds have not been spent in regards to grants for law enforcement, ORV damage restoration and ORV trail maintenance. This reservoir of funds coupled with a strong use pay program presents a unique opportunity for Michigan to make and sustain fundamental, positive shifts in ORV management to meet mandates to protect state resources from pollution or impairment while providing an integrated forest recreation system on the 3.9 million acre state forest system.

6.0 Citations

- Lynch, J. and Nelson, C. 1997. **ORV Trail and Route Assessment**. Michigan Department of Natural Resources, Lansing, Michigan.
- Michigan Office of Highway Safety Planning. 2004. **2003 Michigan traffic crash facts**. Michigan State Police, Lansing, Michigan.
- Nelson, C. 1989. **Registered Michigan off-road vehicle use and users**. Department of Park and Recreation Resources, Michigan State University, East Lansing, Michigan.
- Nelson, C., Lynch, J. and Stynes, D. 2000. **Michigan licensed off-road vehicle use and users: 1998-99**. Department of Park, Recreation and Tourism Resources, Michigan State University, East Lansing, Michigan.
- Nelson, C. and Lynch, J. 2001. **Trends in off-highway vehicle (OHV) use, users, regulations and trails in Michigan: 1975-2000**. The 5th Outdoor Recreation and Tourism Trends Symposium: 23-29. Department of Park, Recreation and Tourism Resources, Michigan State University, East Lansing, Michigan.
- US Consumer Products Safety Commission 2003. **2002 Annual Report of ATV Deaths and Injuries**. U.S. Consumer Products Safety Commission, Washington, DC.

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