

White Pine State Park Trail Use and Users: Kent County, 2005

Introduction

The White Pine State Park Trail (WPT) is a 92-mile rail-trail from White Cap Stadium in Comstock Park north to Cadillac. From its southern terminus for the first 13 miles north to Russell Road in northern Kent County, the WPT is paved and open only to non-motorized uses other than horseback riding. North of Russell Road to Cadillac, the WPT is gravel and open to non-motorized uses (including equestrian) as well as winter snowmobiling. Currently, the trail is managed by the Michigan Department of Natural Resources (DNR) with assistance from the non-profit Friends of the White Pine Trail. There are no trail user fees, except those for snowmobile trail permits. Monies for acquisition and development came from the Michigan Natural Resources Trust Fund and the Michigan Department of Transportation (MDOT), and operations funding from Michigan State Park dedicated funds and snowmobile permits and gasoline sales taxes. Recently, the DNR and Kent County Parks have discussed transferring management of the paved portion of the WPT to Kent County. To assess use on the paved portion, researchers from the MSU Department of Community, Agriculture, Recreation and Resource Studies conducted observations and a self-administered survey of selected trail users during July-September, 2005. The authors thank Larry Solce (DNR) and Roger Sabine (Kent County Parks) for their assistance. The research was funded by MDOT, the Michigan Agricultural Experiment Station and MSU Extension.

Methods

Trail use was observed at five different points (four segments) on the WPT on systematically selected days in three hour blocks during the study period. Observation points were White Cap Stadium, Kent County's Rouge River Park in Belmont, downtown Rockford, the 12 Mile Road parking area and just south of Russell Road. A trained survey administrator (one of the two junior authors) was positioned adjacent to the trail. They counted all individuals going one direction, classifying them as adults or children and noting their mode of travel (bicycle, foot, etc.). Observations were then extrapolated to estimate July through September use. At ten-minute intervals during three-hour observation periods, the survey administrator would select the next adult passing and ask him/her to respond to a self-administered one-page questionnaire. The minimum number of surveys distributed in an observation period was one and the maximum 16. During the study period on sample days/times, 707 surveys were distributed, with 511 (72%) completed and returned. Those not agreeing to participate cited a lack of time, training and couldn't stop or already completing a survey and not wanting to do a second.

The survey data provides two important measures. For respondents, the data provides accurate information about uses, but is not representative of distinct individual users, as frequent visitors are more likely to be sampled. However, when the data are weighted to account for this frequent use bias, the characteristics of distinct users can be appropriately assessed. This report first describes observed use, then characteristics of uses based on unweighted survey data and finally, characteristics of distinct users based on weighted survey data.

Observation Highlights

- The paved portion of the WPT had 588 estimated daily uses from July 1 through Sept. 30, 2005, with total estimated use of 54,096. Of those, 52% were on weekends and 48% on weekdays.
- Adults represent 81% of the uses and children 19%. Of adult uses, 77% were bicycling, 17% walking/running and 6% inline skating. For child uses, 62% were bicycling, 30% walking/running and 8% inline skating.

Use Highlights from Surveys

- Most (92%) WPT uses were by those who live or work in Kent County, with 8% from elsewhere.
- For adults, males were 56% of the uses and females 44%. More than half (55%) of the adult uses were by those 41-60 years of age, 28% by those 19-40 and 17% by those over 60.
- Most (58%) uses were by those living less than five miles from the WPT and 41% didn't drive to the trail.
- Seventy-five percent of uses were for three hours or less and 97% were rated as satisfactory experiences.

Distinct User Highlights from Surveys

- On average, distinct visitors used the WPT 5 times per year, with about half their uses during June – August.
- Seventy-eight percent were Kent County residents and 3% had a disability that impacted work or recreation.
- The three most common suggestions for WPT improvement were no suggestion/doing fine (41%), better maintain trail surface or pave north (25%) and add bathrooms/drinking fountains/trash barrels/benches (13%).

Trail Use Estimates and Characteristics

WPT Use Estimate

Adding the use estimated for each segment based on observations provides a total estimate of 102,782 uses from July 1st through September 30th, 2005. However, based on survey data, the typical use involved almost two segments of the four segments. Hence, this average use of multiple segments (1.96) is divided into the total estimate (102,782) providing a more conservative and realistic estimate of 54,096 uses for the period, or an average of 588 per day. Of those, 48% (25,966) were weekday uses and 52% (28,130) were weekend uses. Adults (18 years and over) accounted for 81% of the uses and children for 19%. If it was assumed that use of the trail during April through June 2005 was at a similar level, uses for the April through September 2005 would be estimated to be 108,192. For both adults and children, bicycling was the most common trail use (Table 1).

Table 1. Observed WPT uses by adults and children, July – September 2005.

Trail Uses	% Adult Uses	% Child Uses
Bicycle	77	62
Foot (walk/run)	17	30
In-line	6	8

Purpose of WPT Use and Trail Access

Survey data suggest the primary purpose of most WPT uses was either for normal exercise (52%) or recreation (35%). Training level exercise accounted for 10% of uses and 3% had a primary purpose of transportation to work, school, or other locations. The vast majority (97%) of WPT uses were rated satisfactory by the participants (6-9 on a scale of 1-9 with “9” being highly satisfied and “1” being highly dissatisfied), with 57% being rated “9” and 23% “8.” One percent of uses were rated as neutral (“5”) and 2% as being unsatisfactory (“1-4”).

The majority of WPT uses (59%) involved driving a vehicle to the trail. More than half (58%) of the uses were by those living less than five miles from the trail. Literally every cross street, adjacent park and a number of trailside homes were noted as access points. The three most common access points were downtown Rockford area including the public parks, Belmont from Rogue River Park and the 12 Mile Road parking area. Half (50%) of the uses were for less than two hours and 75% of the uses were for three hours or less.

A slight majority (54%) of the use was by solo trail participants. For all parties (solo and group), the average number of members was 1.8. Few parties (16%) contained children, who made up 19% of the total observed users.. Of the children uses, 53% were by girls and 47% were by boys. Parties that included children typically had one or two children. For adults, males accounted for 56% of the uses and females for 44%. More than half (55%) of the adult uses were by those 41-60 years old, 28% by those 19-40 and 17% by those over 60. Four percent of user parties had one or more members defined as disabled under the Americans with Disabilities Act.

Tourist Data

Tourist uses, use by those who do not live or work in Kent County, accounted for 8% of the WPT uses. Comparing tourist uses to uses with local origins, tourists uses were more likely to be for recreation (73% vs. 32%) and less likely to be for normal exercise (21% vs. 55%), training level exercise (6% vs. 10%) or transportation (0% vs. 3%). Tourist use occurred along the entire paved length. Rockford was the most common access point to the trail for tourists. Eighty percent of tourist uses involved a vehicle driven to the trail. Ninety-seven percent of tourist uses were rated as satisfactory, none as neutral and 3% as unsatisfactory. Adult tourist uses were primarily by males (59%) and 64% were by a user 50 years old or older. Thirteen percent of tourist use parties had one or more children. Thirty-eight percent of tourist uses involved eating in a restaurant during their trail use and 28% included shopping during their trail use. The vast majority (87%) of those citing a primary reason for their WPT visit noted bicycling, 8% walking/running, 3% in-line skating and 2% fishing.

An additional postage paid postcard questionnaire was distributed to all those who completed a survey and were identified as tourists. Of the 40 provided a postcard, 18 (45%) completed the additional questionnaire and returned it by mail. Of these tourist respondents, 83% were from Michigan and 17% resided elsewhere. For 78%

of the tourists, using the WPT was the main purpose of their visit to the area. This suggests that approximately 6% of all WPT uses are by tourists who primarily visit the WPT area to use the WPT. Of the tourists surveyed who visited Kent County primarily to use the WPT, 29% stayed overnight in Kent County and 71% were on day visits. Most (79%) of those same tourists while in the WPT area ate at a restaurant, 57% bought gasoline, 43% bought food or beverage in a grocery or convenience store and 21% stayed at a motel or hotel. In total for those tourist parties, they averaged \$85 per party (\$41 per person) in spending in the local area during their WPT use.

Distinct Trail User Characteristics

Source of Discovery of the WPT

The largest proportion (49%) of distinct trail users first learned of the WPT by living in the area. Another 18% first learned by word of mouth from friends or relatives. Thirteen percent saw the trail once they were in the area. The remainder of users surveyed learned of the trail from the media (8%), local or state maps (5%) or by a variety of other means (7%) including signs, trail related events, friends group, bicycle salespersons, trail books and the Internet.

Distinct WPT Users' Trail Activities during the Past Twelve Months

Of those who had previously used the WPT, the average number of uses the previous 12 months was 5, with almost half occurring during June through August. Recreation was the most common motivation for distinct trail users (77%) to use the trail, followed by normal exercise (12%), training level exercise (4%) and transportation (2%). It is useful to note that the most common motivation of distinct users is much different than when we earlier considered uses, where normal exercise is the most common motivation. This suggests a typical normal exercise user tends to have many more trail uses in a given period of time than a typical recreation user.

Distinct User Suggestions for WPT Improvement

Users were asked in an open-ended format to suggest one most important improvement to the WPT. The most frequent suggestions of distinct user were: no suggestion/doing fine (41%), improve trail surface/pave more trail (25%), more drinking fountains/bathrooms/trash barrels/benches (13%), better trailside maps/signs/surface lines (5%), better maintain/clean facilities/resources other than trail surface (3%), more security/patrol/lighting (2%) and all other suggestions combined (11%).

Distinct User Suggestions for WPT Extension

When asked if they had specific suggestions on where they would prefer the WPT be extended, 65% had no suggestions, 22% felt paving north would be an extension, 8% suggested a southward extension into Grand Rapids and the remaining 5% had a variety of suggestions about going east (e.g. to Greenville) or west (e.g. to Lake Michigan). Considered with the suggestions for improvements it is clear that many support paving northward beyond Russell Road.

Distinct Tourist Users

Tourists first learned of the WPT primarily through friends or relatives (41%). Other sources first used by a smaller proportion of tourists were living in the west Michigan area (13%), maps (13%), newspapers (10%), seeing the trail once in the area (8%), signs (5%) and participating in a trail event (5%). The final 5% learned through trail books, riding the WPT on a snowmobile north of Russell Road or on the Internet.

Management Implications of the Study

The paved portion of the WPT serves residents, workers and visitors to Kent County and the communities of Comstock Park, Belmont and Rockford. On an average daily basis the trail receives 588 uses from July through September. Of those uses, 8% are tourist uses. This amounts to an estimated 4,328 uses by tourists during the three month study period. It is reasonable to assume over the six month period April through September, this would double to almost nine thousand tourist uses. Of those uses, 38% included eating in a restaurant and 28% involved shopping, providing an important economic impact. With 78% of the distinct tourist users responding

their primary reason for visiting Kent County was to ride the White Pine, almost seven thousand Kent County tourist visits during April through September were generated by the WPT.

The WPT appeals to trail users of all ages, men and women. The largest user group is adults 41-60 years old. Fitness is a key motivation for many regular trail users in this age group. By far, the most common form of use for both adults and children is bicycling. Due to the 13 mile paved length and two key tunnel or bridge crossings of West River Drive, miles of uninterrupted trail use is possible. Average use time on the WPT is longer than that reported in previous studies of the Pere Marquette, Paint Creek or Lansing River Trails. The paved trail distance and the regular dispersion of towns and population centers are likely contributors to this pattern of use. The heavy orientation to bicycling also suggests bicycle-related facilities along the trail and signage warning of upcoming changes and hazards are important, as many users are going at speeds in excess of 10 miles per hour.

The vast majority of trail uses (97%) were by individuals satisfied with the experience. This speaks well of the trail in general, its maintenance and the environment (including the communities) through which it passes. However, some key sources of dissatisfaction have been identified and many suggestions for improvement made by respondents. The greatest source of dissatisfaction is the WPT surface, especially north of Russell Road. While there were a number of comments about repairing damage by roots and cracking on the paved surface south of Russell Road, there were more about paving additional trail mileage north of Russell Road. However, paving to the north would be a challenge to continuing snowmobile use of the trail in this area. There may be opportunities to pave the outer portions of the trail, in essence creating two narrower paved lanes with a graveled portion in the middle. This would allow snowmobile traffic in the winter and equestrian traffic in the summer to use the center portions of the trail and bicycle and foot traffic to use the outer portions in a way that the pavement surface received little impact from snow machines and horse droppings would fall on gravel rather than pavement.

Other suggestions included the provision of additional comfort facilities such as drinking fountains, bathrooms, benches and trash barrels. While some are available, there is not always information that denotes their location and they are not evenly spaced. Predictability is valuable to many trail users. Likewise improved signage such as distance markers at a more frequent interval (e.g. ¼ mile), better notification of services available in a town or village, improved maps and striping the centerline of the trail were all useful suggestions. Relatively few (2%) comments suggested a need for additional safety and security measures. This speaks well of the Kent County Sheriff's program in conjunction with citizen volunteers to patrol the trail and have citizen volunteers as "eyes and ears" as well as providing assistance to trail users through having basic bicycle maintenance tools with them, assisting with directions, answering questions, being clearly identifiable, etc.

A minority of trail users advocate extending the WPT. For many, the WPT stops at Russell Road as they proceed north because it is unpaved. They perceive an unpaved trail as one they are not likely to use. Others were supportive of connecting to trails in the south such as those in Grand Rapids and county-wide trails such as the Kent Trails system. Fewer trail users advocated trail connections east (toward Greenville) or west (toward Lake Michigan).

Conclusion

The paved portion of the WPT is a prominent and valued asset of Kent County and the State of Michigan. Its already high standing in the community can be enhanced and strengthened by listening to this representative cross-section of trail users and prudently acting on their suggestions.

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