



Marin County Parks

Visitor Use Census and Survey

November 2011

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**Marin County Parks
Visitor Use Census and Survey Report**

November 22, 2011

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1. Introduction

This report provides a summary of findings from the 2011 Marin County Parks (Parks) Visitor Use Census and Survey. The census and survey was designed to capture a representative sample of visitor use of roads and trails within the 34 open space preserves. The objectives of the project were to determine:

- Who is using the open space preserves (by visitor type and location)
- Times and patterns of use
- Visitor attitudes, preferences, and experiences

The goal of the project was to inform the development of a system-wide Road and Trail Management Plan (RTMP). Parks is preparing the RTMP to guide protection of critical resources, to improve the visitor experience, and to provide proper land stewardship, including consideration of appropriate trail/land carrying capacity issues.

1.1. Summary Findings

Summary Census Findings:

- Number of visitors: 1392
- Number of dogs: 494
- 23% of visitors were bicyclist
- 76% of visitors were pedestrians
- 0.4% of visitors were equestrians
- 46% of pedestrians walked with dogs.
- Baltimore Canyon:
 - Highest visitor activity
 - Most dog activity
- Blithedale Summit:
 - Second most visitor activity
 - Most bicycle activity
- Camino Alto:
 - Third most visitor activity
 - Second most dog activity
- Estimated overall preserve annual activity:
 - 2,820,000 to 3,760,000 visitors

Summary Survey Findings:

- Number of surveys: 384
- 69% arrived by driving alone or carpooling
- 22% arrived by walking
- Visitor Origin:
 - 91% from Marin County
 - 2.4% from Sonoma County
 - 1.8% each from Alameda & San Francisco Counties
- Common concerns:
 - Dog & horse waste
- Visitor experience:
 - 97% good to great trail conditions
 - 76% good to great maps and signs
 - 94% good to great interactions

1.2. Report Structure

This chapter includes a description of the data collection methodology with the locations, dates and times the counts and surveys were conducted, when the data collection occurred, and the basis for the methodology.

Chapter 2 presents the regional results of the census and survey including overall activity, activity by visitor type, day of week, and time of day. Chapter 2 concludes with an extrapolation of census data to system wide annual activity.

Chapter 3 presents census and survey results by preserve for location specific findings. This chapter provides detailed information about visitor volumes and direction of travel. Preserve survey results provide information about visitor access mode, most used entrances and exits, most visited destinations and preserve specific concerns.

Appendix A presents an example count form and the survey form.

Appendix B presents an overview of the census extrapolation process used.

1.3. Data Collection Methodology

The data collection methodology was developed to provide unbiased survey protocols and a statistically valid sample of visitors. Data collection included:

- A **census of visitor use** at 14 preserve locations and over a series of up to three peak time periods that provide reasonable picture of use activity.
- An **intercept opinion survey** at the same times and locations to determine visitor attitudes and interests.

Volunteers were used to collect the census and survey data, based on careful design of the survey and count methodology to accommodate volunteers, and training direction and support from Parks staff and consultants. Parks selected and organized the volunteers to avoid bias or interest in the results.

The data collection methodology used is based on the National Bicycle and Pedestrian Documentation Project (www.bikepeddocumentation.org), a nation-wide effort to improve the methodology for collecting bicycle and pedestrian counts and share the data sponsored Alta Planning + Design and the Institute of Transportation Engineers. The count methodology recorded the volume of activity at a specific location and also recorded the direction from which visitors approached the count location.

Locations

Census (counts) and survey data were collected simultaneously at the fourteen locations presented in Table 1-1.

Table 1-1: Census and Survey Locations

Location - Preserve	Weekday Morning	Weekday Afternoon	Weekend Mid-day
1. Baltimore Canyon	x	x	x
2. Blithedale Summit	x	x	x
3. Camino Alto	x	No data	x
4. Cascade Canyon	No data	x	x
5. China Camp State Park	x	x	x
6. Gary Giacomini	x	x	x
7. Indian Valley	x	x	x
8. Mount Burdell	x	x	x
9. Ring Mountain	x	x	x
10. Roy Woods	x	x	x
11. Rush Creek	x	x	No data
12. San Pedro	x	x	x
13. Terra Linda/Sleepy Hollow	x	x	x
14. White Hill	x	x	x

The fourteen locations were selected to be a representative sample of the 34 Marin County Parks preserves.

Census and Survey Days and Times

Volunteers counted and surveyed visitors on September 20 or 22 (Tuesday or Thursday) and on October 1 (Saturday). The volunteers were given the option of either Tuesday or Thursday because both represent typical weekday activity and allows for scheduling flexibility. Weekday and weekend counts were recorded to determine any difference in activity between weekdays and weekends. These count periods were selected to best represent a typical week, i.e. a week without holidays.

Counts were conducted during anticipated peak activity times, 7:30 am to 9:30am and 4:30pm to 6:30pm on weekdays and 11:00 am to 1:00 pm on weekends. Weather was typical for Marin in September, with cool, sometimes foggy mornings and warm dry afternoons. Temperatures ranged from the 60’s to 80’s. This weather is considered to be conducive to typical visitor volumes and behavior.

Visitor Classification

Visitors were classified as bicyclists, pedestrians, equestrians, and those using motorized devices. Activity was recorded by number of visitors. For example, bicyclists were counted by the number of people riding a bicycle, e.g. a tandem bicycle was counted as two bicyclists. This methodology provides an understanding of number of visitors by travel choice rather than number of travel devices. Equestrians were counted by the number of people, e.g. two people on a horse were counted as two equestrians.

The number of dogs was also recorded to gain an understanding of dog walking use and potential needs.

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2. Census and Survey Results

This chapter summarizes overall census and survey results. Specific preserve findings are in Chapter 3.

2.1. Census Summary

Census results are presented in this section and include an overview of activity, including discussion of the most popular preserves by activity type. This section also includes activity by visitor type, activity by day of the week and time of day.

2.1.1. Census Overview

Volunteers counted 1,392 visitors and 494 dogs at the 14 count locations over three two-hour count periods.¹ Figure 2-1 presents average count period volumes by visitor type for each preserve. Because some locations were only counted during two periods, average count period volumes were used to compare activity at each preserve. Key data findings include:

- Baltimore Canyon:
 - Highest visitor activity
 - Most dog activity
- Blithedale Summit:
 - Second most visitor activity
 - Most bicycle activity
- Camino Alto:
 - Third most visitor activity
 - Second most dog activity

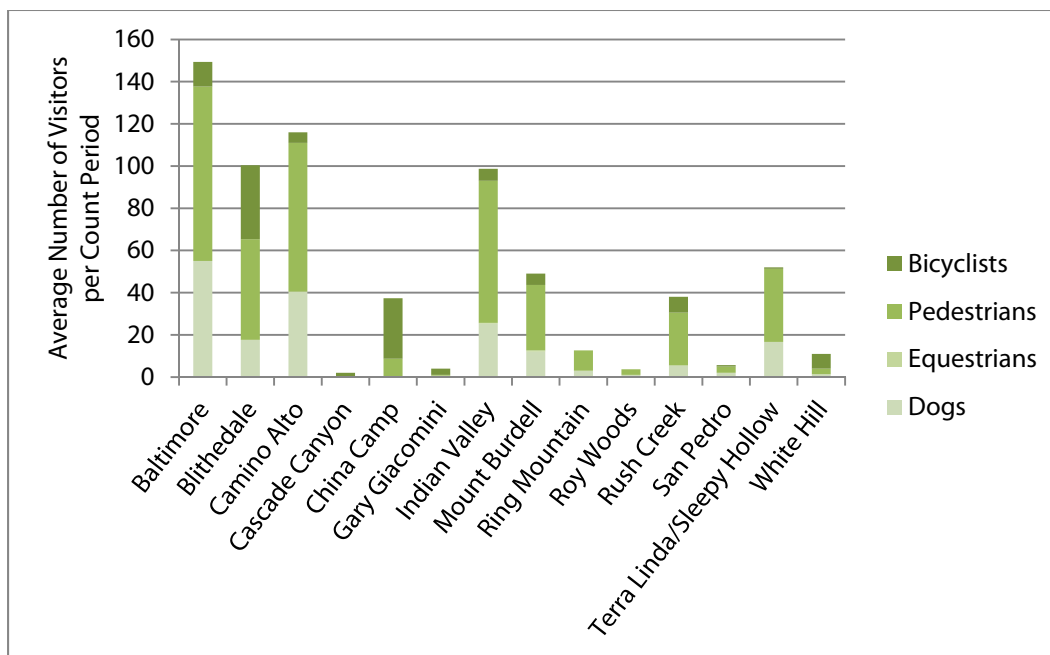


Figure 2-1: Average Visitor Volumes by 2 Hour Count Period

¹ Three locations were counted during only two periods, as presented in Table 1-1.

2.1.2. Regional Activity by Visitor Type

Figure 2-2 presents census results by visitor type. The following section presents a discussion of the census findings.

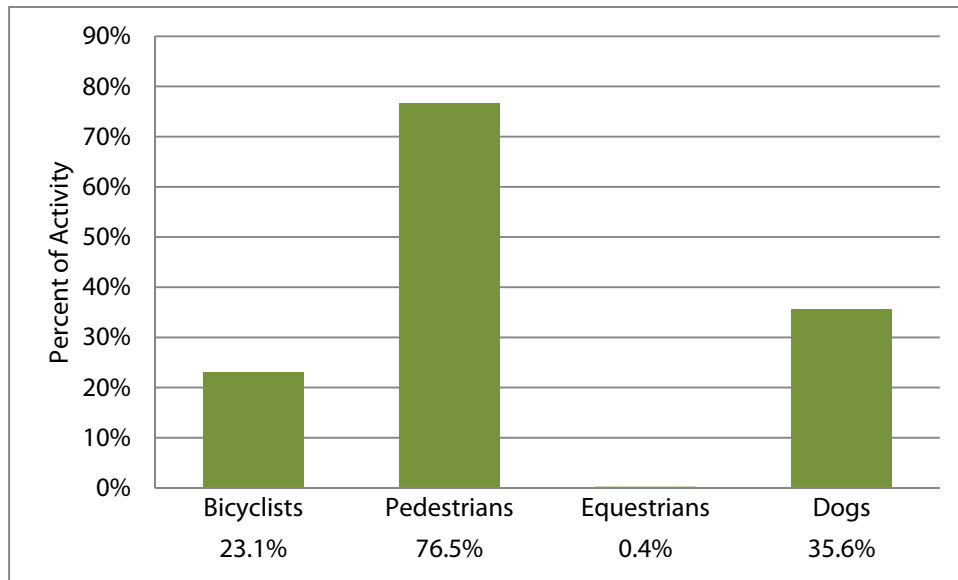


Figure 2-2: Activity by Visitor Type

Bicyclists

Volunteers counted 321 bicyclists, which accounted for 23.1 percent of visitors. The locations with the most bicyclists and respective average count period volumes are listed below. The average counts are presented in parentheses.

- Blithedale (35)
- China Camp State Park (29)
- Baltimore Canyon (12)

China Camp State Park had the highest percentage of bicycles compared to other visitor types (77 percent). Of the locations where 100 or more visitors were counted, Terra Linda/Sleepy Hollow had the lowest percentage of bicycle visitors (2 percent).

Pedestrians

Volunteers counted 1,063 pedestrians, which accounted for 76.5 percent of visitors. The locations with the most pedestrians and respective average count period volumes are listed below.

- Baltimore Canyon (83)
- Camino Alto (71)
- Indian Valley (67)

Ring Mountain had the highest percentage of pedestrians compared to other visitor types (100 percent). Of the locations where 200 or more visitors were counted, Indian Valley had highest percentage of pedestrians (92 percent).

Equestrians

Volunteers counted five equestrians, which accounted for 0.4 percent of visitors. Volunteers counted two equestrians each at Mount Burdell and Gary Giacomini and one at Indian Valley.

The low equestrian activity may suggest equestrian peak activity times differ from pedestrians and bicyclists. Other possible reasons for the low activity may be the count locations are not those used by equestrians or that there may be little equestrian activity system-wide.

Motorized Apparatus Users

Volunteers counted one motorist at Indian Valley traveling eastbound on Indian Valley Fire Road and no visitors using motorized assistive devices.

Dogs

Volunteers counted 494 dogs. Approximately 46 percent of pedestrians walked with dogs. The locations with the most dogs and respective average count period activity are listed below.

- Baltimore (165)
- Camino Alto (81)
- Indian Valley (76)

Baltimore had the highest percentage of pedestrians with dogs (67 percent) of locations where 10 or more dogs were counted.

2.1.3. Visitor Activity by Day of Week and Time of Day

Overall, the weekend mid-day count period had the highest visitor activity (633 visitors and 191 dogs) for the two hour census period. Volunteers counted the most of each t visitor type on the weekend while dog activity was high in the weekday mornings. Figure 2-2 presents the number of visitors by count time.

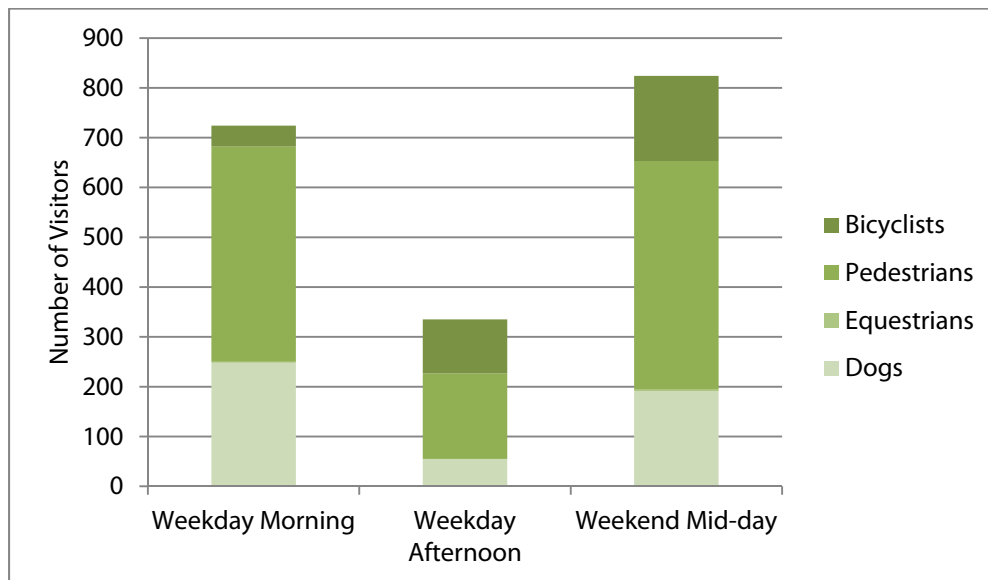


Figure 2-3: Overall Activity by Time of Day

Figure 2-4 through Figure 2-6 present the number of visitors counted in 15 minute increments during the morning, afternoon and weekend, respectively. Figure 2-4 shows volumes for all visitors increased over the weekday morning count period.

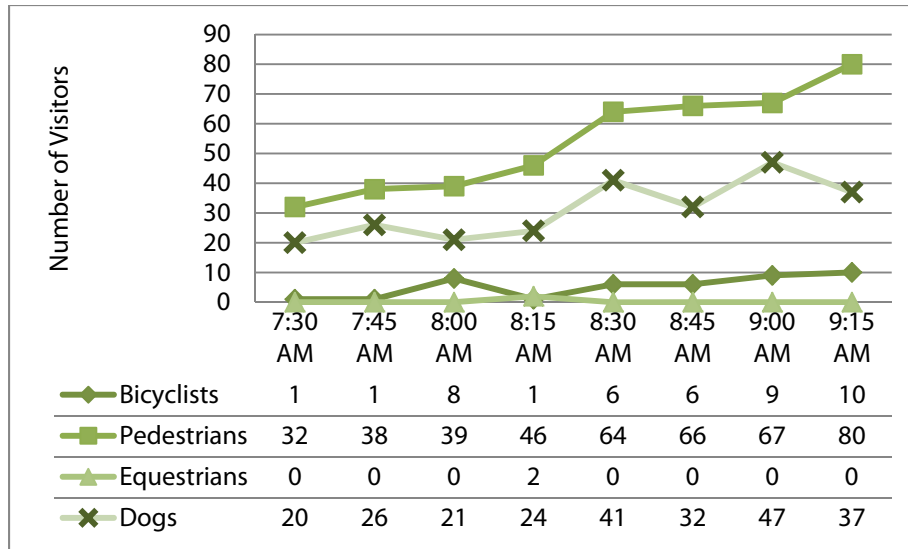


Figure 2-4: Weekday Morning Activity

Figure 2-5 shows weekday afternoon volumes for all visitors except bicyclists remained even. Bicyclist volumes peaked at 5:30pm and 6:15pm.

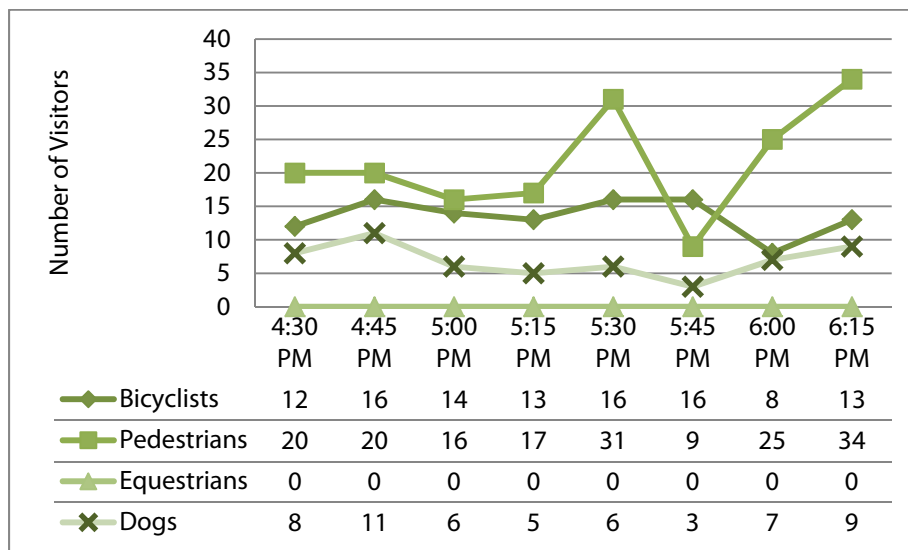


Figure 2-5: Weekday Afternoon Activity

Figure 2-6 shows volumes for all visitors decreased over the afternoon weekend mid-day count period.

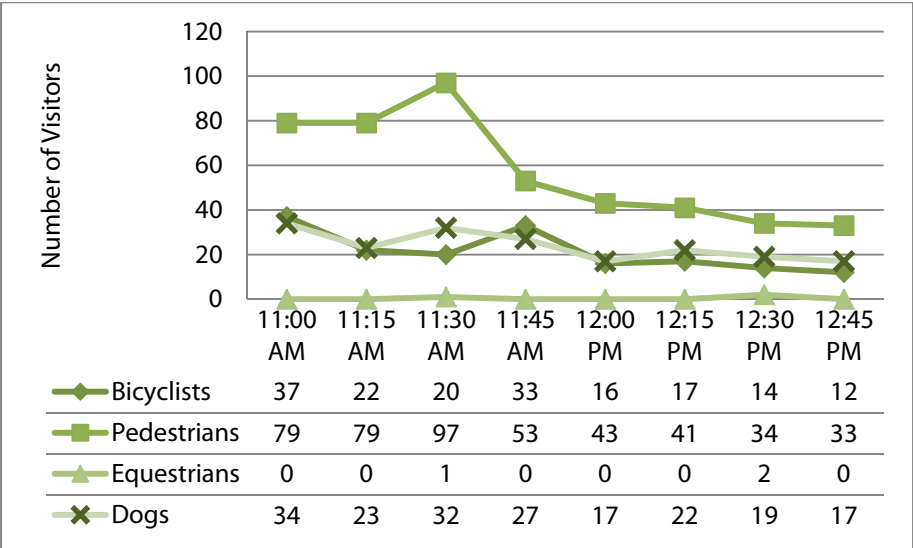


Figure 2-6: Weekend Visitor Activity

2.2. Survey Summary

Overall survey results are presented in this section and include an overview of key results regarding visitor origin, access mode, concerns and visitor experience followed by each survey question with results.

384 people completed the visitor survey. While every volunteer reported approaching every visitor, the participation rate was approximately 28 percent. The participation rate was calculated using the number of people counted during the census (1,384) and the number of completed surveys.

Visitor Origin

- The overwhelming majority of visitors (91 percent) lived in Marin County.
- Of those that were from “out of the county” the majority came from Sonoma County (37 percent).
- The most “out-of-county” visitors (25 surveys or 75 percent) were surveyed on the weekend count period.
- A roughly equal percent of out-of-county visitors reported using the during weekdays (47 percent) and weekends (53 percent) despite count results indicating higher weekend use.
- Most out-of-county visitors (49 percent) reported typically visiting in the morning.

Access Mode to Preserve

- Nearly half of visitors surveyed accessed the preserve by driving alone (48 percent), while about one fifth carpoled (21 percent).
- Many visitors walked to the preserve (22 percent).

Travel in Preserve

- The overwhelming majority of visitors (82 percent) reported walking through the preserve.
- Seventeen percent reported bicycling through the preserve.
- Forty-four percent of visitors surveyed brought at least one dog into the preserve (slightly less than the census count of 46 percent).

The survey travel mode results differ slightly from the census where 76 percent walked and 23 percent bicycled through the preserve. This indicates bicyclists were surveyed less often.

Visit Purpose

- Exercise (93 percent)
- Recreation (49 percent)
- Experience nature (41 percent)
- Social (29 percent)

Visit Frequency to Marin County Parks

- Daily (47 percent)
- Weekly (39 percent)
- Monthly (9 percent)

Accessibility Concerns

- Only three visitors cited accessibility concerns.

- At Gary Giacomini, one visitor cited unstable footing from loose rocks and another visitor cited inaccessibility for persons with mobility impairments.
- At San Pedro Mountain, one visitor cited inaccessibility at the end of Hacienda Way due to parked cars blocking the entrance.

Visitor Concerns and Comments

- Requests for more single track trails (5)
- Concerns regarding bicyclists riding too fast and poor intersections with bicyclists (6)
- Dog waste was the most common concern (16)
- Off-leash dogs (8)
- Conversely, permitting off-leash dogs was appreciated (9)
- Horse waste (8)

Visitor Experience

- The majority of visitors rated trail conditions as great or good (97 percent).
- The majority of visitors felt the usability of maps and signs are great to good (76 percent); however 24 percent rated the maps and signs as fair to poor.
- Interactions with other visitors was rated as great or good (94 percent)

2.2.1. Survey Results by Question

The following present the results from each question of the visitor intercept survey.

Visitor Gender

Figure 2-6 shows the gender distribution of survey respondents, the majority (61 percent) were women.

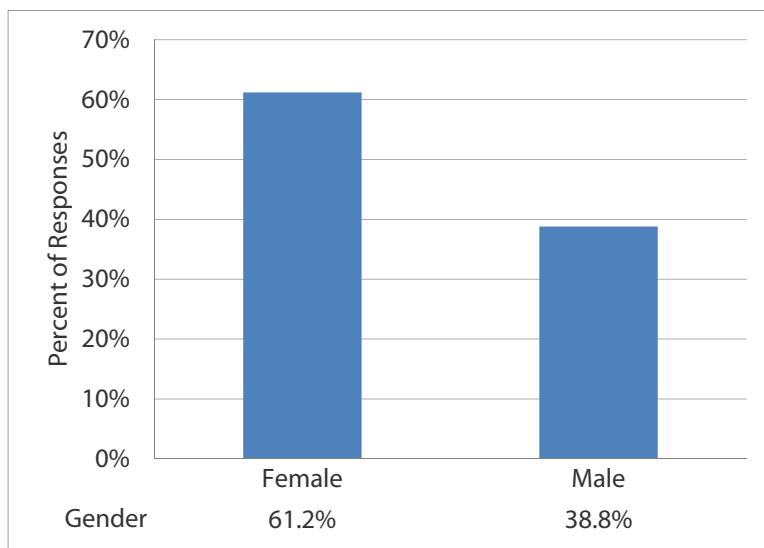


Figure 2-7: Regional Survey Participants Gender

Visitor Age

Figure 2-7 shows the age distribution of survey respondents. Preserve visitors tend to be older than the average County resident. The largest age group (36 percent) was between the ages of 45 and 54. Over 65 percent of those surveyed were older than 45. This age distribution is different from Marin County demographics. The 2010 American Community Survey presents a relatively equal age distribution among all age groups.²

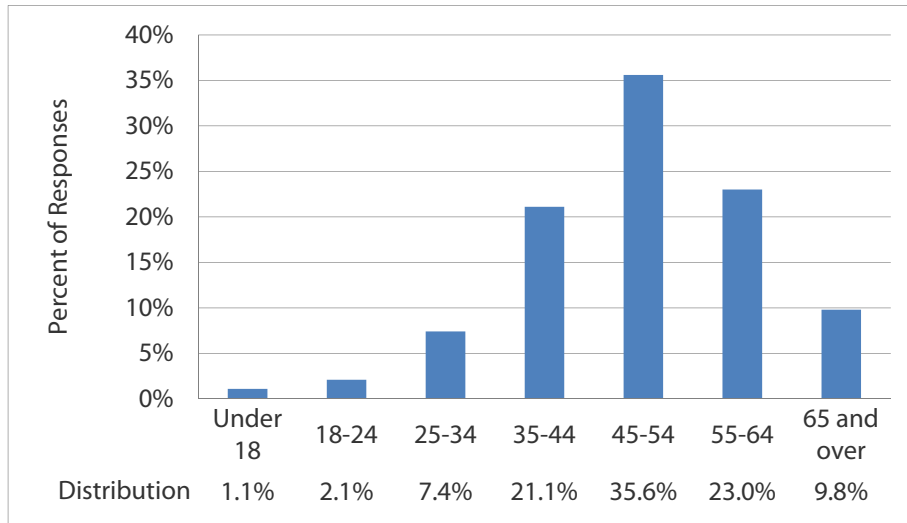


Figure 2-8: Regional Survey Participants Age Group

Visitor Origin

Figure 2-8 shows the survey respondents' counties of origin. Most survey respondents from outside Marin County (26 percent) originated in Sonoma County. The most cited "other" counties not specifically listed included Sacramento County and Contra Costa County.

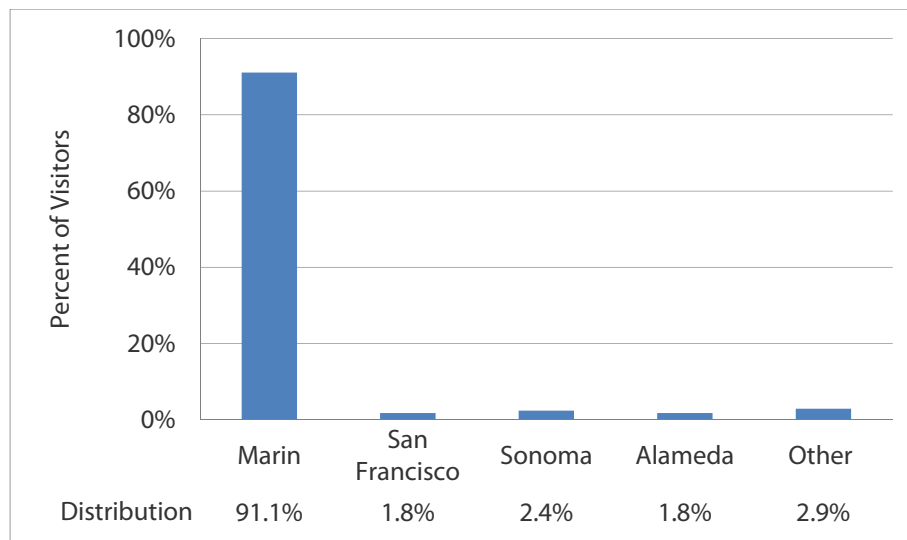


Figure 2-9: County of Origin

² http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_S0101&prodType=table

Origin by Time of Day and Day of Week

Figure 2-10 shows the survey respondents' counties of origin by the time they typically visit the preserve. The majority of respondents (77 percent) indicated typically visit in the morning.

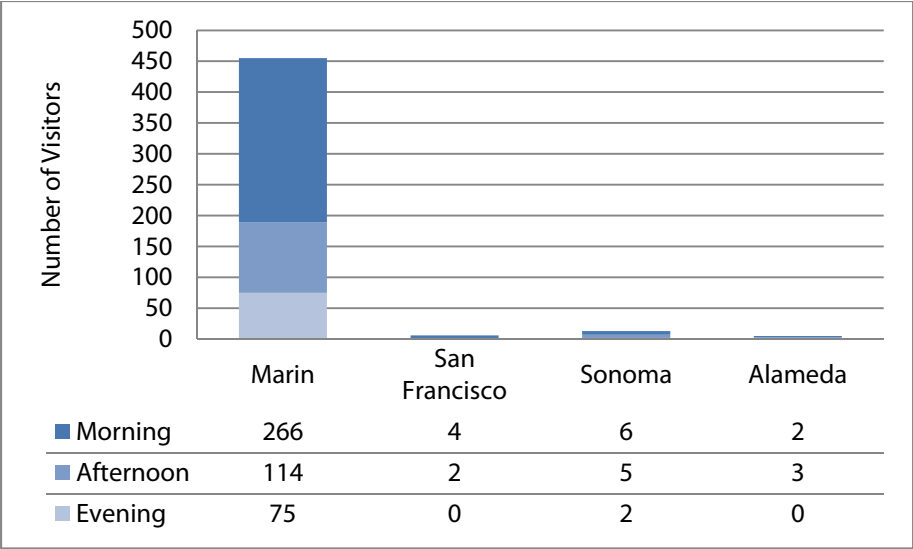


Figure 2-10: County of Origin by Time of Day

Figure 2-11 shows the survey respondents' counties of origin by the day of week. Of the survey respondents that answered the question, 43 percent typically visit on the weekday and 47 percent on the weekend. Most respondents from San Francisco (66 percent) visit on the weekend. While most respondents from Sonoma and Alameda (71 percent) visit on the weekdays.

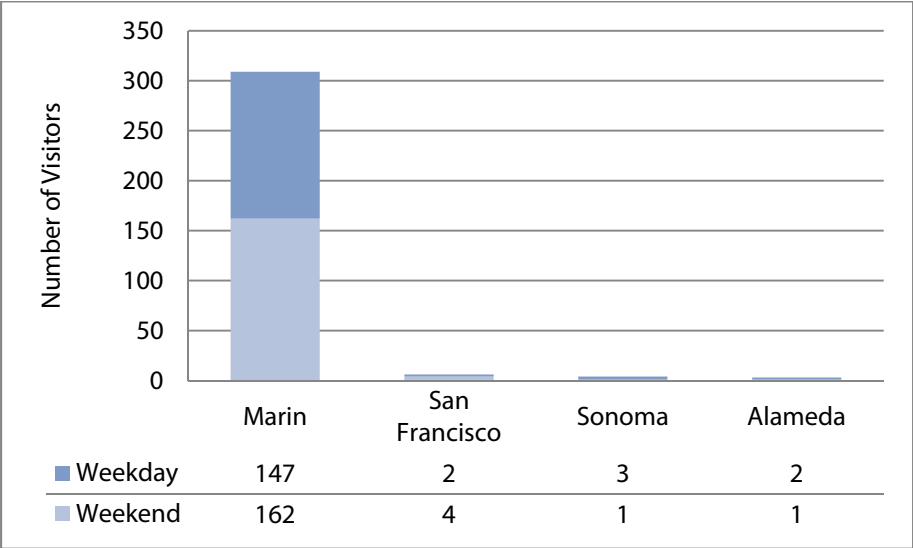


Figure 2-11: County of Origin by Day of Week

How did you get here today?

Figure 2-12 shows how survey respondents accessed the preserve. The majority of respondents (69 percent) used a motorized vehicle, e.g. drove alone or carpooled to get to the preserve. Over 22 percent walked to the preserve. “Other” access modes included one respondents arriving by horseback and another by jogging.

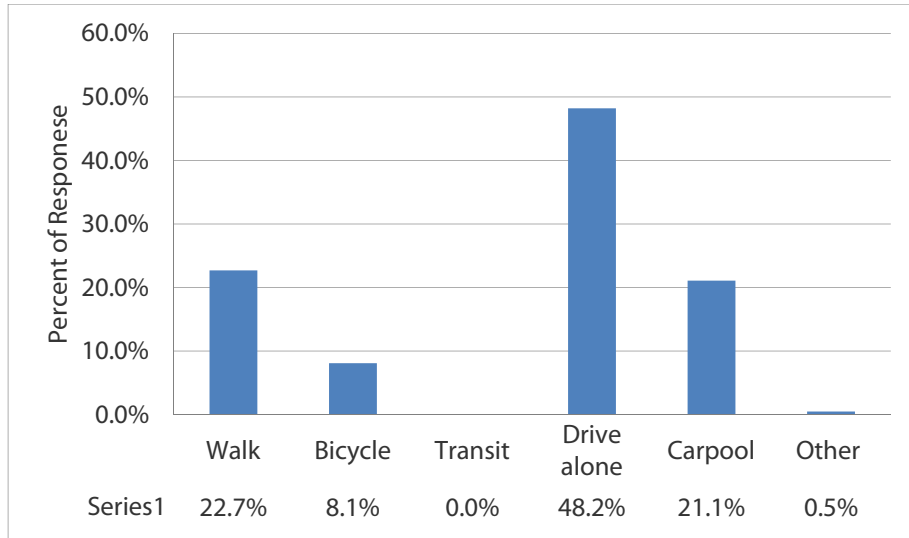


Figure 2-12: Access Mode

How are you traveling on the trail today?

Figure 2-12 shows by what mode respondents traveled through the preserves. The overwhelming majority of respondents (82 percent) indicated walking on the trails.

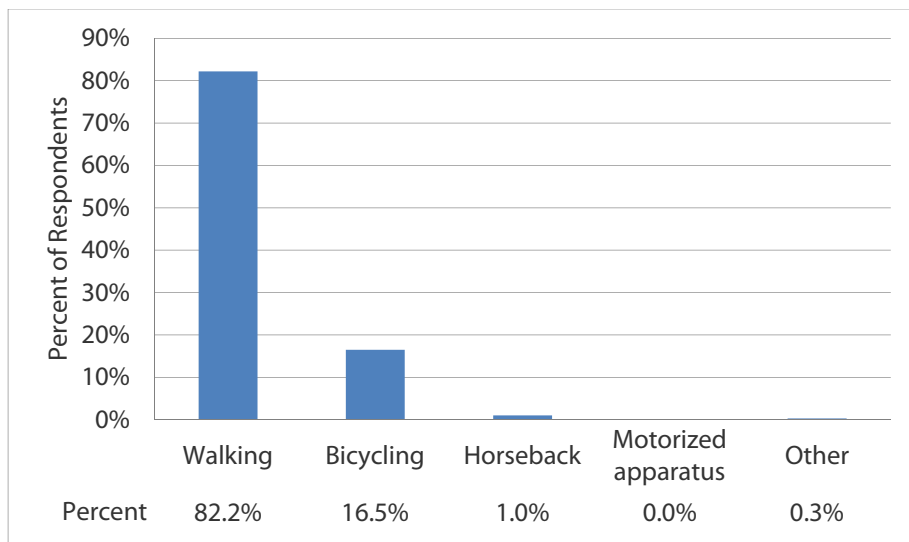


Figure 2-13: Travel Mode on Trail

What best describes the purpose of your trip? Check all that apply.

Figure 2-14 shows the purpose of the survey respondents' visit. Respondents could choose more than one purpose and the overwhelming majority (93 percent) visit for exercise, followed by recreation and to experience nature. Dog walking made up 64 percent of "other" purposes.

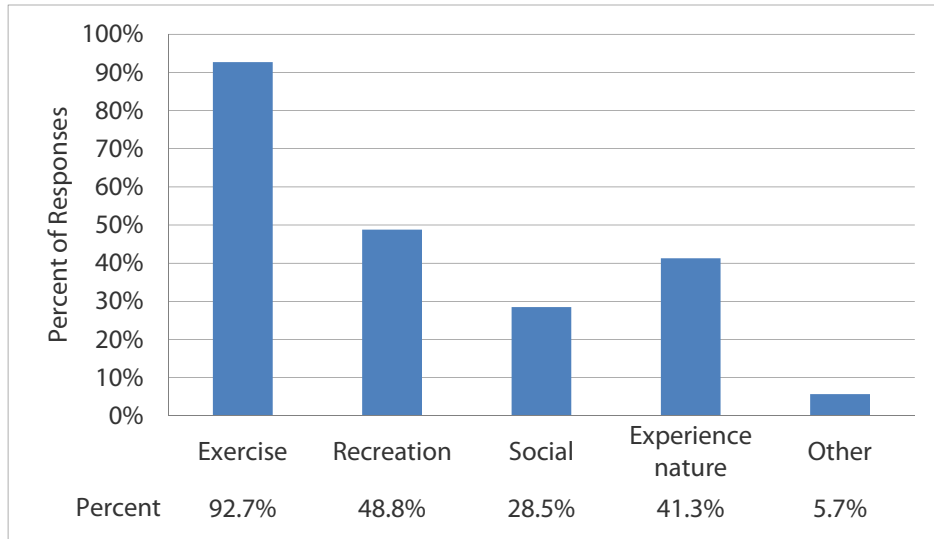


Figure 2-14: Visit Purpose

How frequently do you use this trail?

Figure 2-15 shows how often survey respondents visit the specific preserve. A roughly equal percentage of survey respondents accessed preserves on a daily (35 percent) or weekly (38 percent) basis.

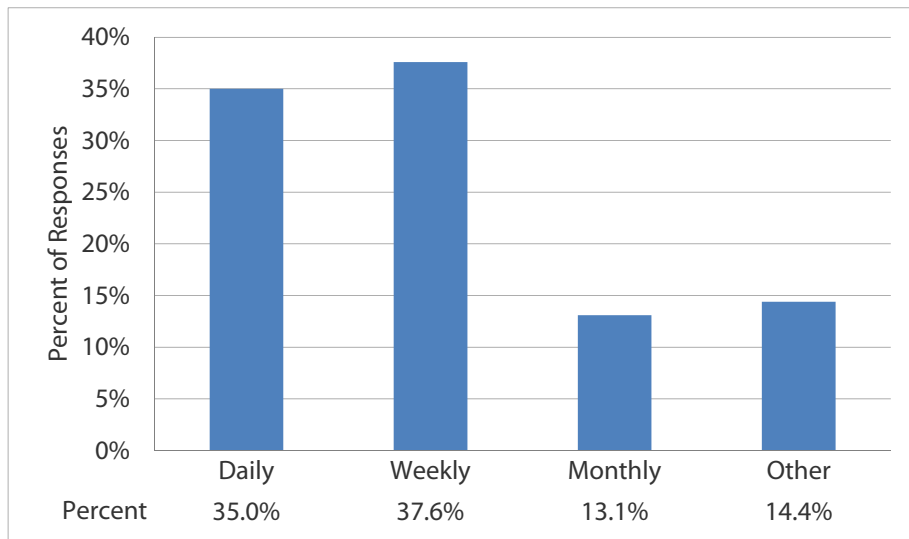


Figure 2-15: Visit Frequency

When do you typically use this trail? Check all that apply.

Figure 2-15 shows the time of day when survey respondents typically visit the surveyed preserve. The majority (76 percent) of respondents visited in the morning. Just over half (52 percent) of survey respondents visited on the weekend.

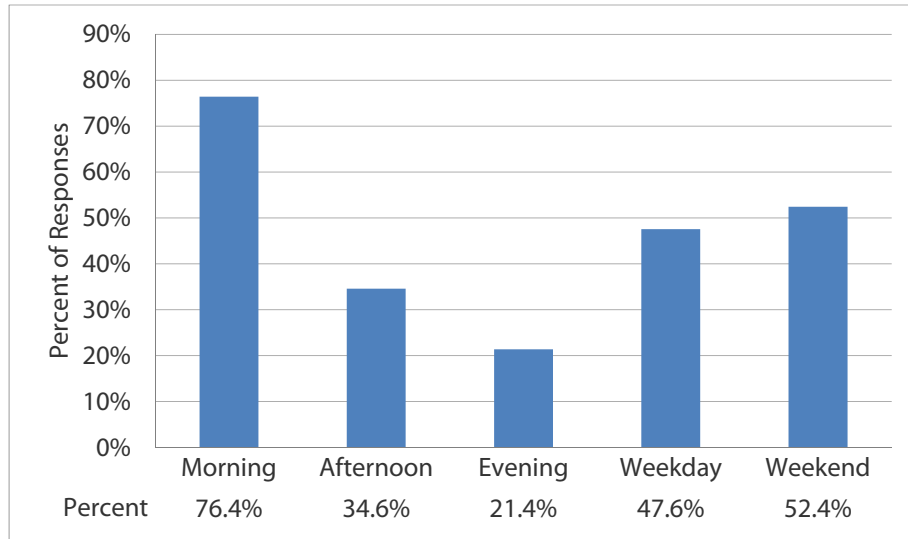


Figure 2-16: Time of Day for Visit

How frequently do you use Marin County Parks trails?

Figure 2-17 shows the frequency of visits (rather than the survey location). Nearly half (47 percent) of respondents indicated visiting on a daily basis and nearly 40 percent on a weekly basis.

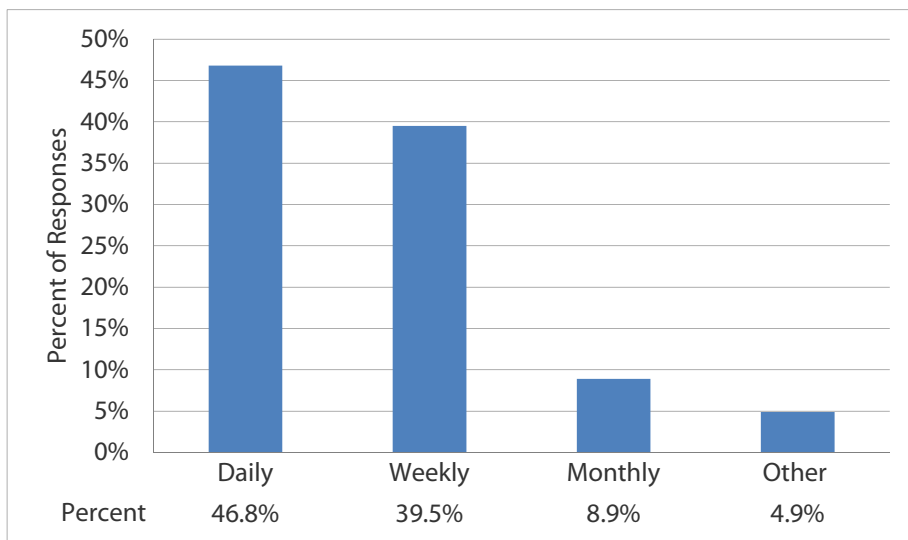


Figure 2-17: Visit Frequency

Did you bring a dog(s) today?

Figure 2-18 shows the number of dogs survey respondents brought with them. The majority of survey respondents (56 percent) did not bring dogs. The majority of those with dogs (67 percent) had one dog.

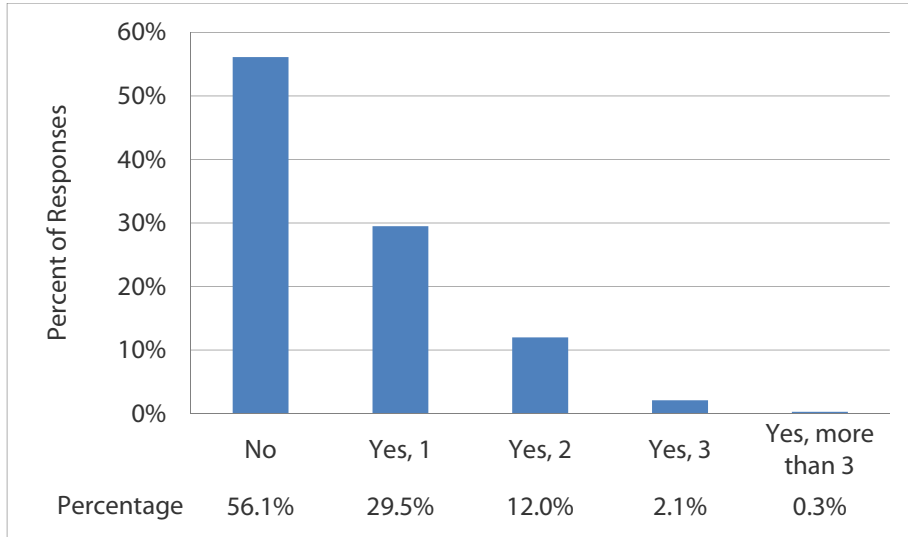


Figure 2-18: Dog Ownership

What is your destination?

Figure 2-19 shows the destinations most cited by survey respondents. While specific preserve responses are provided in Chapter 3, this provides an understanding of the more popular system wide preserve destinations. Most respondents indicated they traveled through the preserve on a loop rather than traveling through the preserve to reach a particular destination.

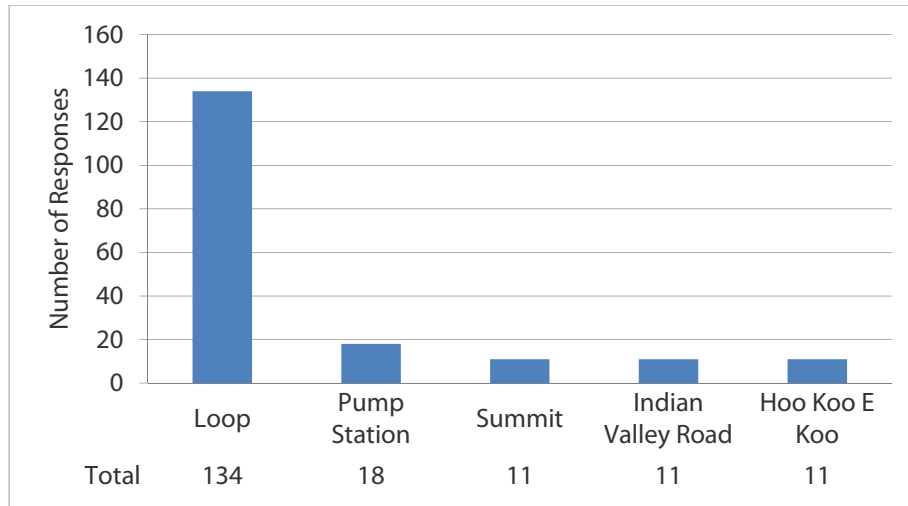


Figure 2-19: Most Cited Destinations

Where did you enter the preserve?

Figure 2-20 shows the most cited preserve access points used by survey respondents. Entrances most used by respondents were Crown Road and Binford Road.

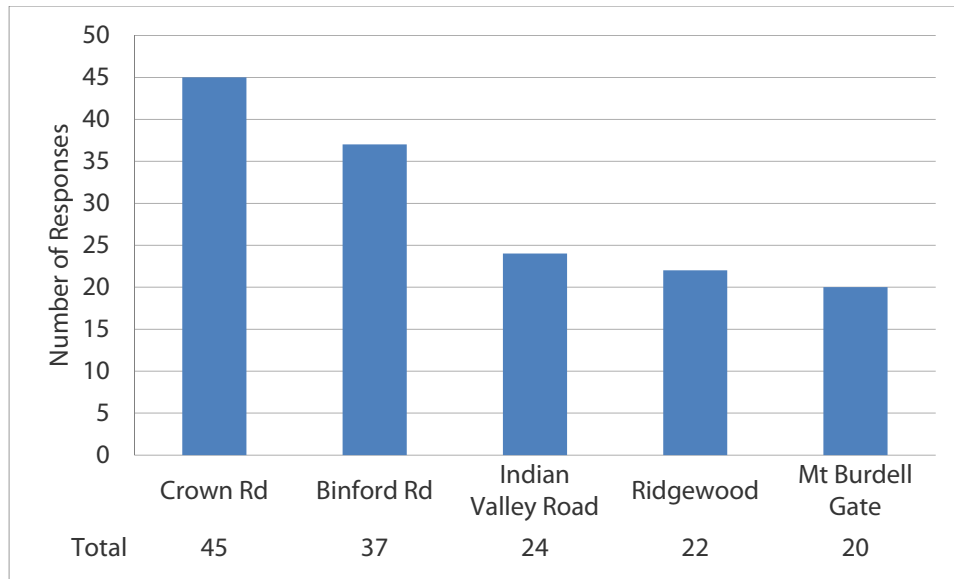


Figure 2-20: Most Cited Access Points

Where do you intend to exit?

Figure 2-21 shows the most cited exit points used by survey respondents. Exits most used by respondents were nearly identical to the entrances used, with Crown Road and Binford Road being the most popular.

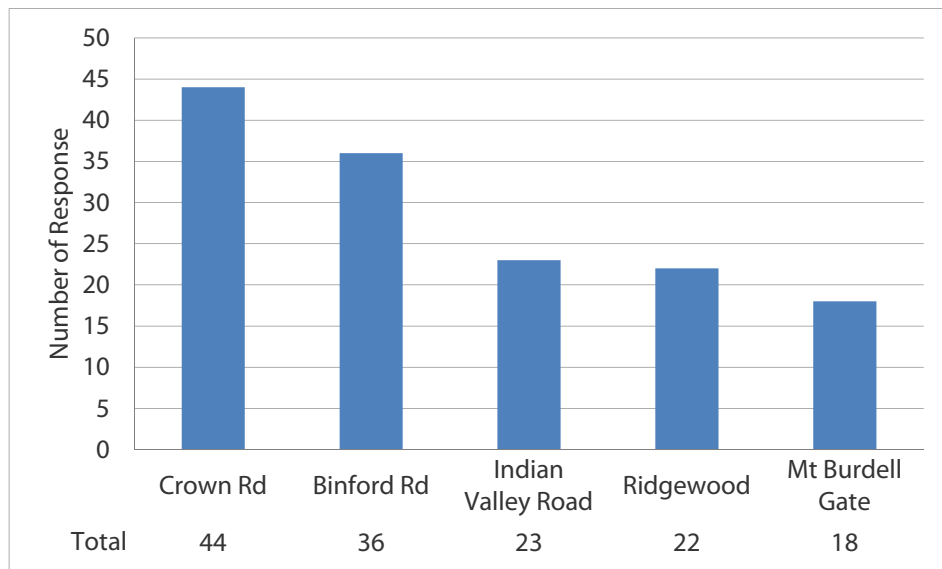


Figure 2-21: Most Cited Exit Points

How long do you intend to be on the trail today?

Figure 2-22 shows the duration of visits by survey respondents. Most visits (92 percent) were under two hours. Under half (40 percent) visited for under one hour and just over half of respondents (51 percent) spent one to two hours.

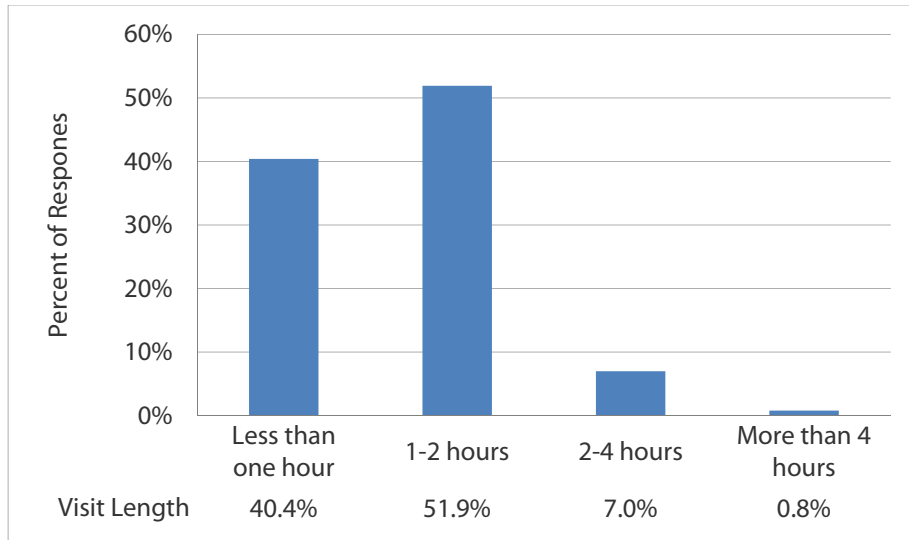


Figure 2-22: Visit Length

Please tell us about your trail experience.

Figure 2-23 shows how survey respondents rated their experience. Nearly all of respondents rated trail conditions and their interactions with other visitors as good or great. Respondents rated the usability of maps and signs the least favorably, with 24 percent rating usability as fair or poor.

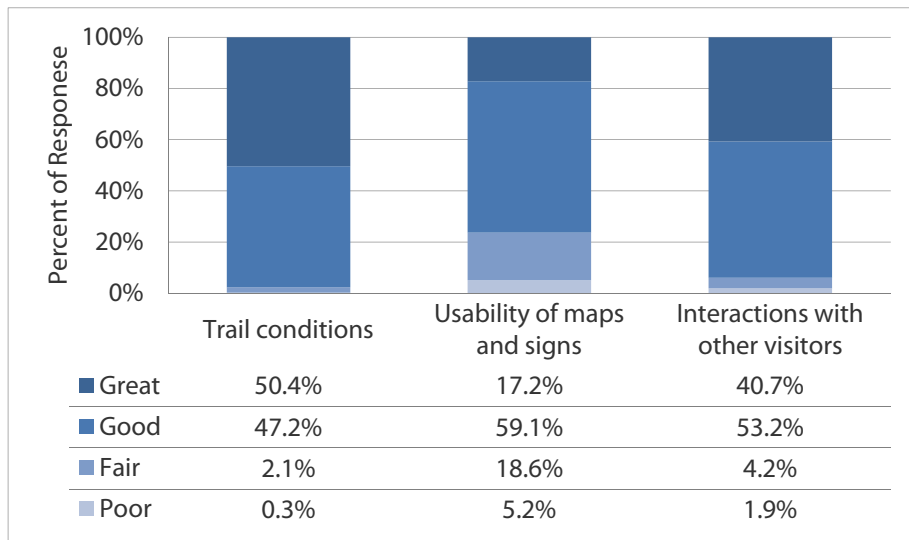


Figure 2-23: Visitor Experience

2.3. Estimating Regional Annual Activity

This census effort collected data at 14 of the 34 (or 44 percent) open space preserves. The census locations are assumed to be a representative sample of activity in all preserves. Table 2-1 presents activity at the 14 locations adjusted to all preserves by census time and day. Estimated system-wide activity ranges from 636-1439 visitors.

Table 2-1: Counts Adjusted to All Preserves

	Weekday Morning	Weekday Afternoon	Mid-day Weekend
Activity at 14 preserves	476	280	633
Multiplier	44%	44%	44%
Adjusted activity to 100% of preserves	1082	636	1439

When comparing levels of use among regional park systems, annual usage is the most commonly available number and most easily understood measure for a variety of audiences. Annual activity was estimated using the extrapolation model developed as a part of the National Bicycle and Pedestrian Documentation Project (NBPDP), an annual count and survey effort sponsored by Alta Planning + Design with support from the Institute of Transportation Engineers (ITE). The extrapolation factors were developed from the extensive 24-hour annual count data submitted to the National Bicycle and Pedestrian Count Project. Its' robust data sources make it the most relevant and useful non-motorized transportation extrapolation model to date, and it is increasingly being applied in a wide range of regions.

While the data is the most robust, its sources are mostly from paved pathways rather than unpaved trails as those in Parks preserves. The decision to use this extrapolation model was made for two reasons. The first is because there is no comparable source for unpaved trails. The second reason is that though the volumes of activity may differ, the daily, weekly and season variation is likely comparable.

Appendix B outlines the extrapolation methodology and steps. Like all extrapolation models, the NBPDP model extends short counts to an annual figure using count patterns collected from comparable sources. In this case, it is assumed trail daily, weekly and seasonal activity follows common patterns – peak morning and evening weekday activity and peak mid-day weekend activity; and higher activity outside of the winter rainy season. See Appendix B for the assumed patterns.

Using the estimated peak overall weekday morning and peak weekend activity, a range of estimated annual activity was developed for the system. Table 2-2 presents the range of estimated weekly, monthly and annual activity.

Table 2-2: Estimated Annual Activity

Period	Estimated Activity (Range)	
Weekly Activity	38,100	70,100
Monthly Activity (September)	169,000	301,000
Annual Activity	2,820,000	3,760,000

The total estimated annual preserve activity is between 2,820,000-3,760,000 visitors.

3. Preserve Results

This section presents results of the census and survey by preserve. While activity and survey responses were presented as percentages in the overview, they are presented as numbers in this discussion because of lower respective activity levels and survey responses.

3.1. Baltimore Canyon Preserve

Figure 3-1 presents the count location in Baltimore Canyon.

3.1.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011
4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Baltimore Canyon had the highest visitor activity per count period. Volunteers recorded 283 visitors and 165 dogs during the three count periods (Figure 3-2).

The overwhelming majority (91 percent) of visitors approached from the east on Hoo-Koo-E-Koo Trail and from the south on Crown Fire Road (Figure 3-3).

Bicyclists

Volunteers counted 35 bicyclists. A roughly equal number of bicyclists approached from the east on Hoo-Koo-E-Koo Trail and from the south on Crown Fire Road.

Pedestrians

Volunteers counted 248 pedestrians, which made up 88 percent of visitors.

Just over half (52 percent) of pedestrians approached the intersection from the east on Crown Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted 165 dogs. Most dogs (92 percent) approached the count location the east on Hoo-Koo-E-Koo Trail and from the south on Crown Fire Road.

Baltimore Canyon Preserve had the highest percentage of pedestrians with dogs (66 percent) where 10 or more dogs were counted.

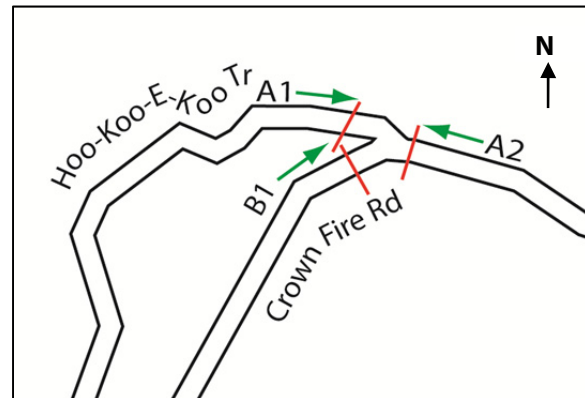


Figure 3-1: Baltimore Canyon Preserve Count Location

Key findings:

- Number of visitors: 283
- Number of dogs: 165
- 12% of visitors were bicyclists
- 88% of visitors were pedestrians
- No equestrians were counted
- 66% of pedestrians walked with dogs
- 91% of activity was on:
 - East Hoo-Koo-E-Koo Trail approach
 - South Crown Fire Road approach

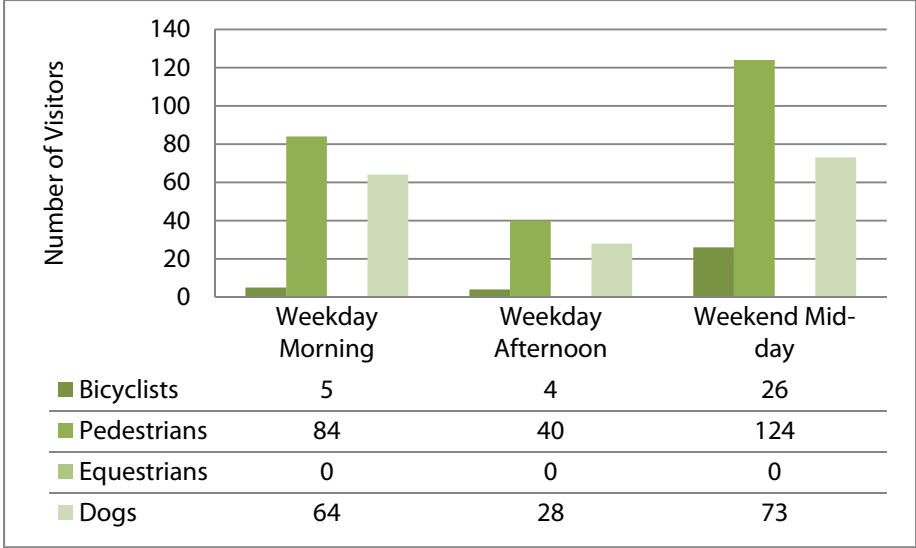


Figure 3-2: Baltimore Canyon Activity by Time

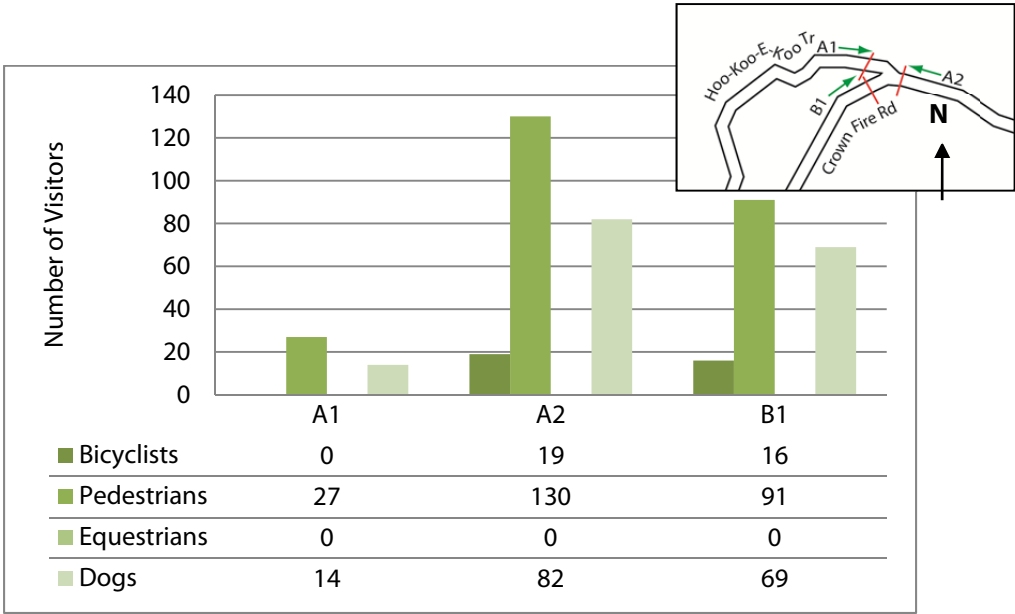


Figure 3-3: Baltimore Canyon Trail Activity by Direction

3.1.2. Survey Summary

Forty-six people participated in the survey at Baltimore Canyon.

Access Mode

Figure 3-4 presents how visitors arrived at Baltimore Canyon.

More than half (54 percent) of survey respondents drove alone to Baltimore Canyon and another 41 percent arrived by carpool.

Entrance

Locations where survey respondents entered are presented below, followed by the number of responses for each location.

- Crown Road (44)
- Blithedale Avenue, Mill Valley (1)

Exit

Locations where survey respondents exited Baltimore Canyon are presented below, followed by the number of responses for each location.

- Crown Road (43)
- Blithedale Avenue, Mill Valley (1)
- Sunrise Conte, Corte Madera (1)

Destination

Popular preserve destinations cited by survey respondents are listed below, followed by the number of responses.

- Pump House (15)
- Koo K Koo Loop (10)
- Fire Road (8)

Visitor Experience

Figure 3-5 presents how visitors rated their experience on the preserve. Summary results are presented below.

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs: Good to great (67 percent)
- Interaction with other visitors: Good to great (91 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Too many bikes (4)
- Off leash dogs (2)
- Insufficient parking (1)

Key findings:

- Number of surveys: 46
- 54% arrived by driving alone
- 41% arrived by carpool
- Key entrance/exit:
 - Crown Road
- Popular destinations:
 - Pump House
 - Koo K Koo Loop
 - Fire Road
- Visitor experience:
 - Trail conditions – 100% good to great
 - Maps and signs – 67% good to great
 - Interactions – 91% good to great

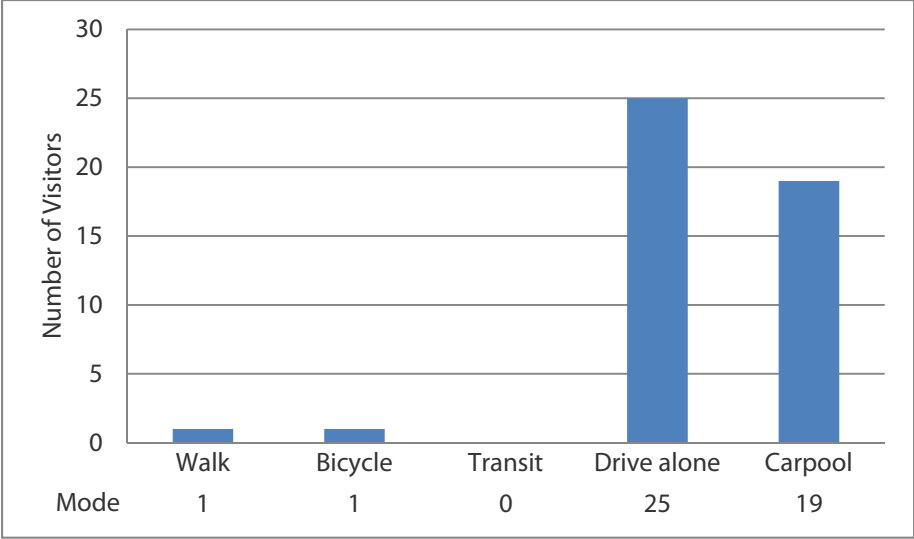


Figure 3-4: Baltimore Canyon Access Mode

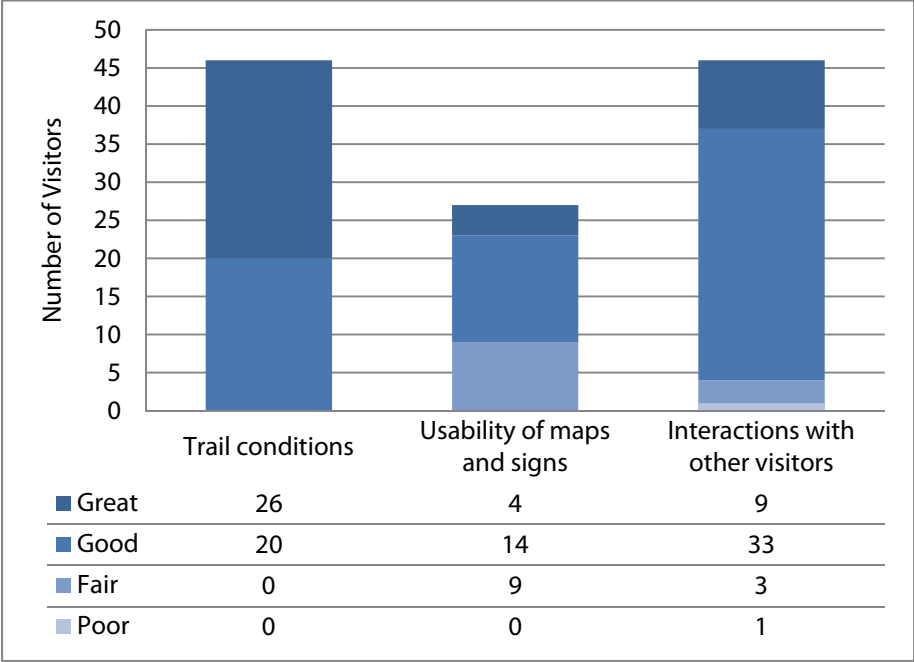


Figure 3-5: Baltimore Canyon Visitor Experience

3.2. Blithedale Summit Preserve

Figure 3-5 presents the count location at Blithedale Summit.

3.2.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am-1:00pm
Saturday, September 24, 2011

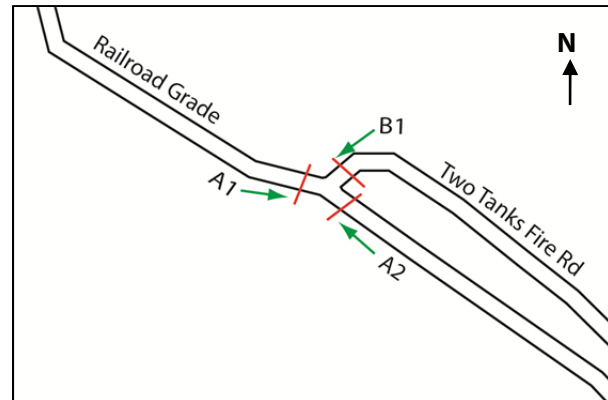


Figure 3-6: Blithedale Count Location

Count Summary

Blithedale Summit had the fourth highest activity per count period. Volunteers recorded 248 visitors during two count periods (Figure 3-7).

The majority of activity (90 percent) was on both the north and south approaches from Railroad Grade (Figure 3-8).

Bicyclists

Volunteers counted 105 bicyclists. Blithedale Summit had the third highest percentage of bicyclist activity per total visitors (42 percent) among locations where seven or more bicyclists were counted.

The majority of bicyclists (58 percent) approached from the south on Railroad Grade.

Pedestrians

Volunteers counted 43 pedestrians, which made up 58 percent of Blithedale visitor activity. The majority (63 percent) of pedestrians approached from the south on Railroad Grade.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted 53 dogs and approximately 37 percent of pedestrians at this preserve were walking dogs. Most pedestrian with dogs (62 percent) approached from the south leg of Railroad Grade.

Key findings:

- Number of visitors: 248
- Number of dogs: 53
- 4th highest activity on census days
- 42% of visitors were bicyclists
- 58% of visitors were pedestrians
- No equestrians were counted
- 37% of pedestrians walked with dogs
- 90% of activity was on both the north and south approaches from Railroad Grade

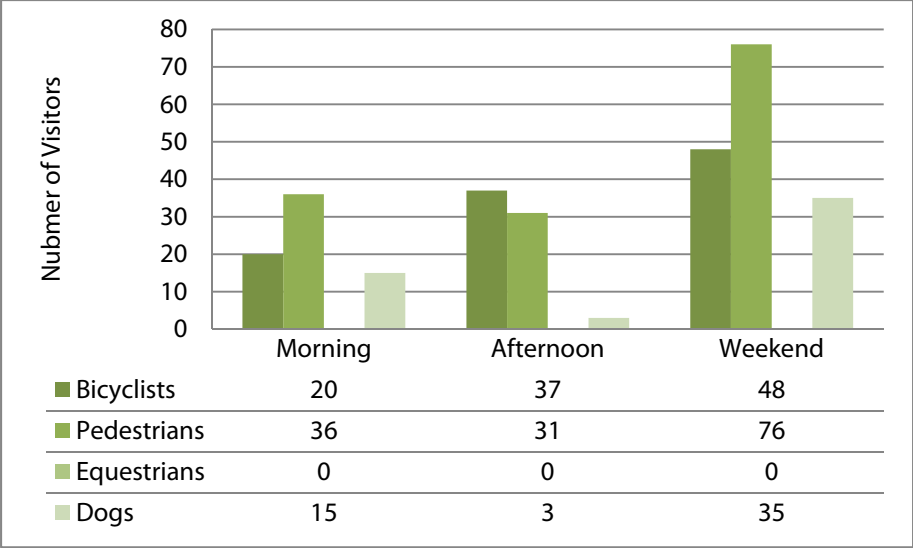


Figure 3-7: Blithedale Activity by Time

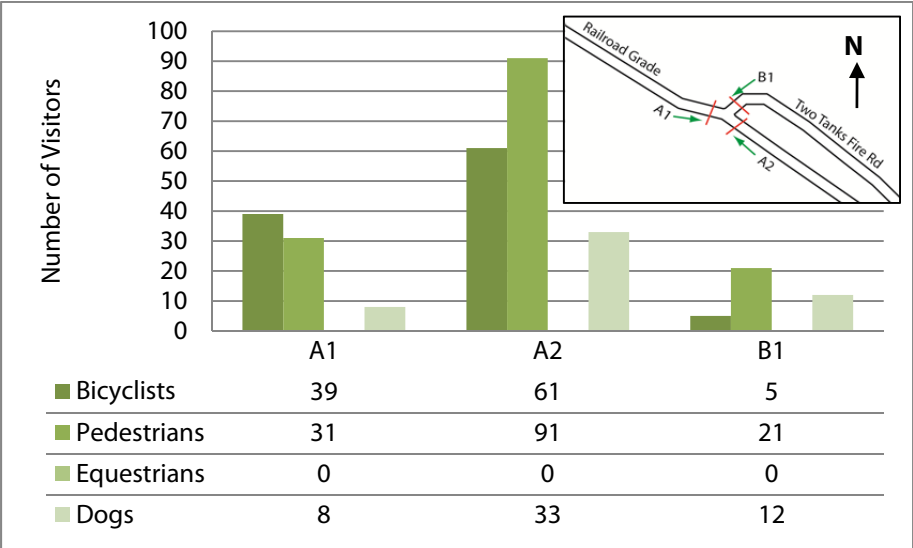


Figure 3-8: Blithedale Trail Activity by Direction

3.2.2. Survey Summary

Thirty-five people responded to the survey at Blithedale Summit.

Access Mode

Figure 3-9 presents access mode counts.

The majority of visitors (57 percent) walked to Blithedale Summit.

Entrance

Locations where survey respondents entered Blithedale Summit are presented below, followed by the number of responses for each location.

- W. Blithedale Gate (23)
- South Marin Line Gate (2)

Exit

Locations where survey respondents exited Blithedale Summit are presented below, followed by the number of responses for each location.

- W. Blithedale Gate (29)
- South Marin Line Gate (3)

Destination

Popular preserve destinations cited by survey respondents are listed below, followed by the number of responses.

- Ridge Loop (10)
- Hoo Koo-e-Koo Loop (3)

Visitor Experience

Figure 3-10 presents how visitors rated their past experiences. Summary results are presented below.

- Trail conditions: Good to great (97 percent)
- Usability of maps and signs: Good to great (57 percent)
- Interaction with other visitors: Good to great (88 percent)

Overall, most visitors rated their experiences as great or good. Many visitors (43 percent) rated the usability of maps and signs as fair or poor.

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Off-leash dogs (2)
- Dog waste (2)
- Request for single track bicycle trails (1)

Key findings:

- Number of surveys: 35
- 57% arrived by walking
- Key entrance/exit:
 - W. Blithedale Gate
- Popular destinations:
 - Ridge Loop
 - Koo K Koo Loop
- Visitor experience:
 - Trail conditions – 97% good to great
 - Maps and signs – 57% good to great
 - Interactions – 88% good to great

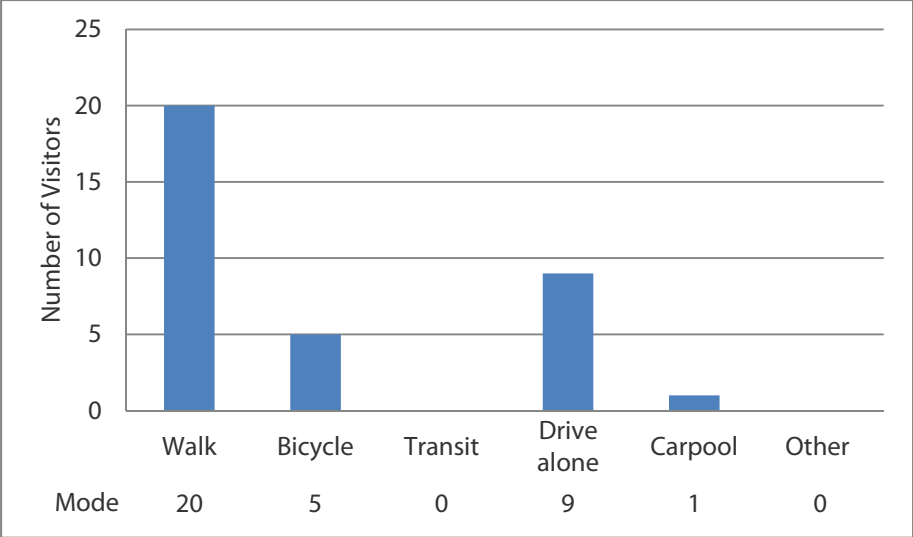


Figure 3-9: Blithedale Summit Access Mode

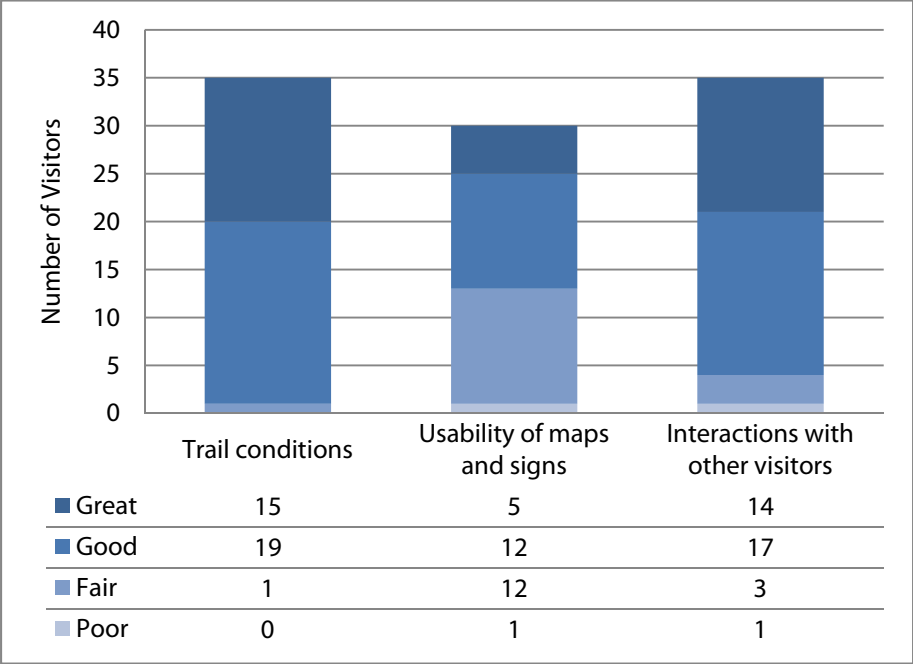


Figure 3-10: Blithedale Summit Visitor Experience

3.3. Camino Alto Preserve

Figure 3-11 presents the count location at Camino Alto.

3.3.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Camino Alto had the second highest activity per count period (two counts conducted). Volunteers recorded 151 visitors during two count periods (Figure 3-12).

The majority of visitors (76 percent) traveled on Escalon Fire Road (Figure 3-13).

Bicyclists

Volunteers counted 10 bicyclists (or 7 percent of activity) and bicycle volumes were relatively even among count location approaches.

Pedestrians

Volunteers counted 141 pedestrians, which made up 93 percent of activity.

Most pedestrians (44 percent) approached from the north on Escalon Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted 81 dogs, most of which approached from Escalon Fire Road. Camino Alto had the second highest percentage of pedestrians with dogs (57 percent) among locations where 10 or more dogs were counted.

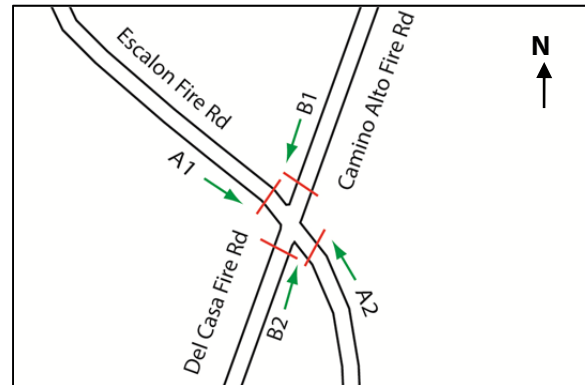


Figure 3-11: Camino Alto Count Location

Key findings:

- Number of visitors: 151
- Number of dogs: 81
- 7% of visitors were bicyclists
- 93% of visitors were pedestrians
- No equestrians were counted
- 57% of pedestrians walked with dogs
- 74% of activity was on the north and south approach of Escalon Fire Road

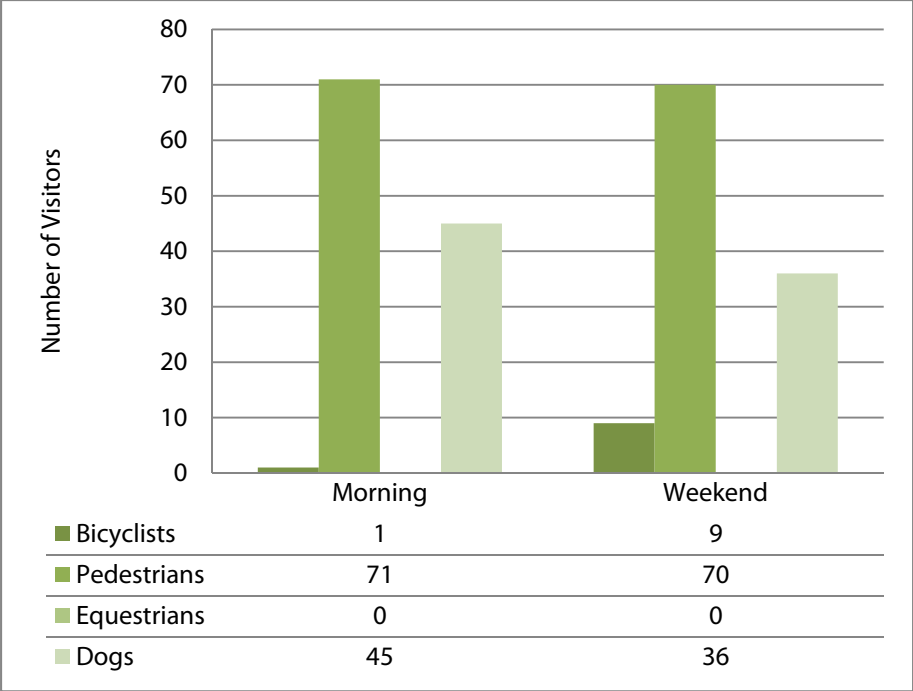


Figure 3-12: Camino Alto Activity by Time

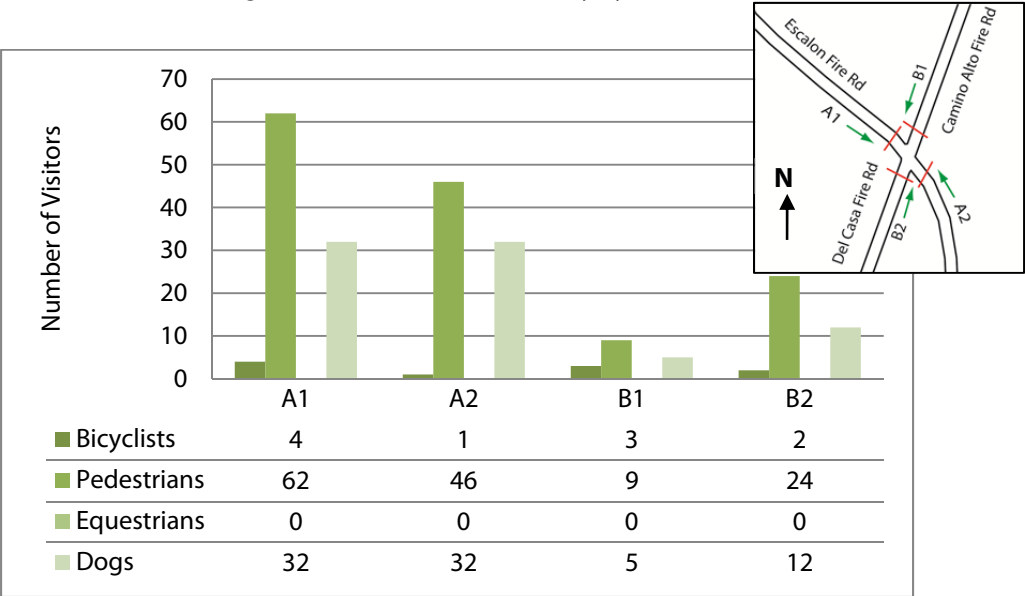


Figure 3-13: Camino Alto Trail Activity by Direction

3.3.2. Survey Summary

Thirty-six people responded to the survey at Camino Alto.

Access Mode

Figure 3-14 presents access mode counts.

Nearly half (44 percent) of survey respondents drove alone to Camino Alto and another 19 percent carpooled. Thirty-six percent of survey respondents walked to Camino Alto.

Entrance

Locations where survey respondents entered Camino Alto are presented below, followed by the number of responses for each location.

- Camino Alto (10)
- Escalon (8)
- Overhill (8)
- Summit (5)

Exit

Locations where survey respondents exited Camino Alto are presented below, followed by the number of responses.

- Loop (9)
- Summit (3)
- Overhill (8)
- Camino Alto (3)
- Escalon (7)

Destination

Popular preserve destination cited by survey respondents are listed below, followed by the number of responses.

- Summit Drive (9)
- Camino Alto (6)
- Loop (5)

Visitor Experience

Figure 3-15 presents how visitors rate their past experiences. Summary results are presented below.

- Trail conditions: Good to great (97 percent)
- Usability of maps and signs: Good to great (78 percent)
- Interaction with other visitors: Good to great (91 percent)

Overall, survey respondents rated their experiences as great or good. Many survey respondents (22 percent) rated the usability of maps and signs as fair or poor.

Issues and Comments

Survey respondents cited the following issues when asked if they had accessibility concerns and to provide general comments.

- Dog waste (3)
- Horse waste (2)
- Request for improved signage (1)

Key findings:

- Number of surveys: 36
- 44% arrived by driving alone
- Key entrances/exits:
 - Camino Alto
 - Escalon
 - Overhill
 - Summit
- Popular destinations:
 - Summit Drive
 - Camino Alto
 - Loop
- Visitor experience:
 - 97% good to great trail conditions
 - 78% good to great maps and signs
 - 91% good to great interactions

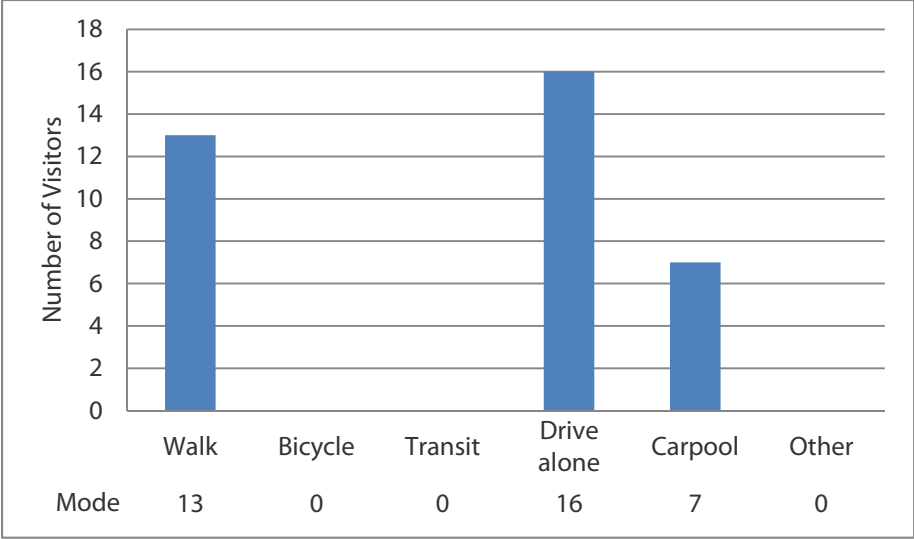


Figure 3-14: Camino Alto Access Mode

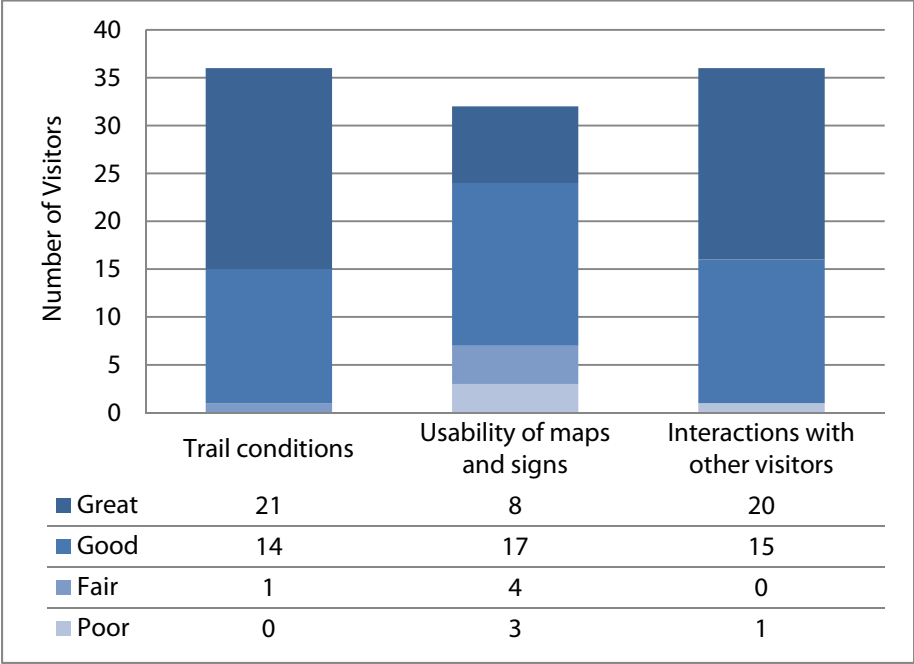


Figure 3-15: Camino Alto Visitor Experience

3.4. Cascade Canyon Preserve

Figure 3-16 presents the count location at Cascade Canyon.

3.4.1. Count Summary

Count Periods

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Cascade Canyon had the lowest activity per count period. Volunteers counted four visitors over two count periods (Figure 3-17).

Half of visitors traveled on westbound Cascade Fire

Bicyclists

Volunteers counted three bicyclists, which made up 75% of the activity on Cascade Fire Road.

Pedestrians

Camino Alto had the least number of pedestrians. The north on Cascade Falls Trail.

Equestrians

No equestrians were counted at this location.

Dogs

No dogs were counted at this location.

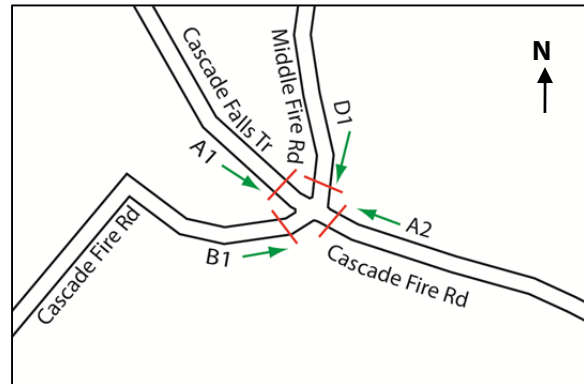


Figure 3-16: Cascade Canyon Count Location

Key findings:

- Number of visitors: 4
- Number of dogs: 0
- Least activity in the system
- 86% of activity was bicyclists
- No dogs or equestrians were counted

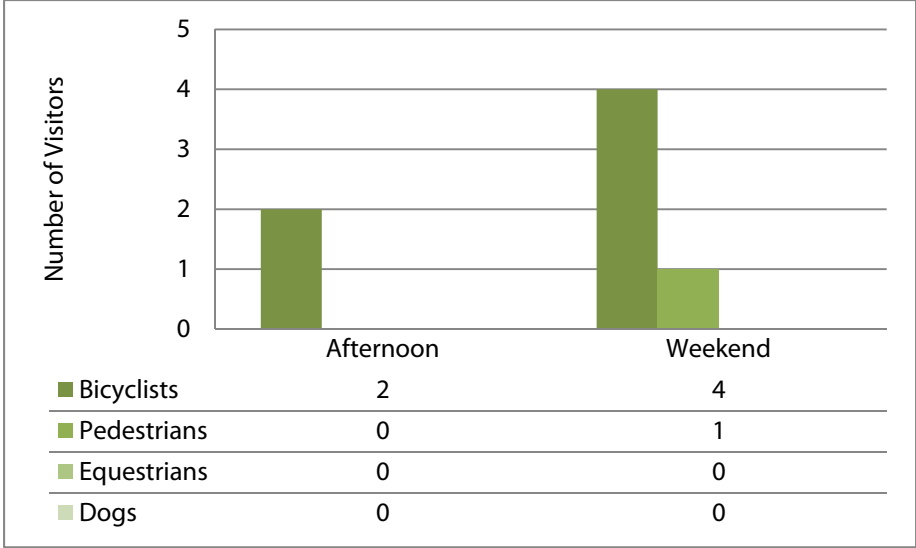


Figure 3-17: Cascade Canyon Activity by Time

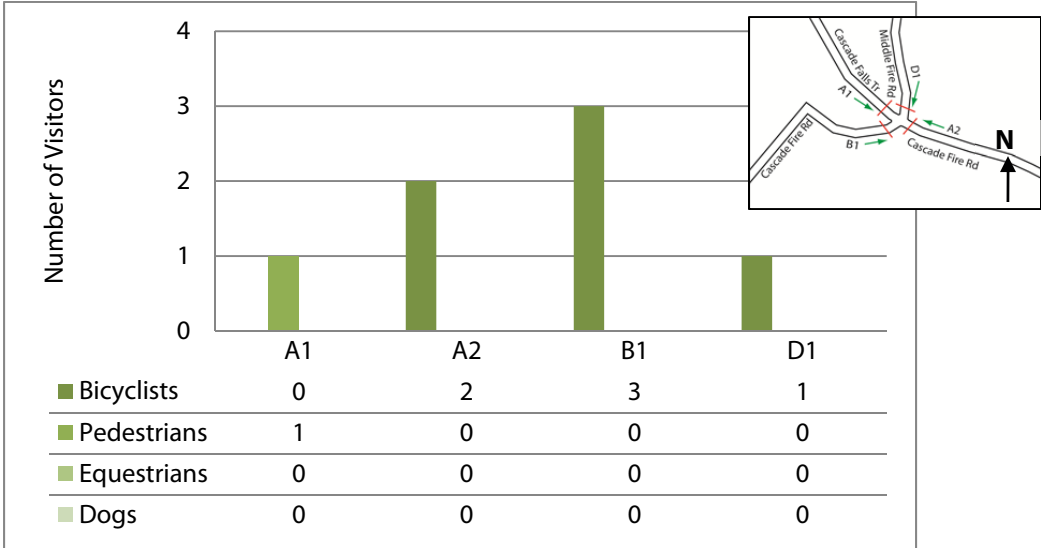


Figure 3-18: Cascade Canyon Trail Activity by Direction

3.4.2. Survey Summary

One person responded to the survey at Cascade Canyon.

Access Mode

The one survey respondent bicycled to Cascade Canyon.

Entrance

The one survey respondent entered Cascade Canyon on Iron Spring Road.

Exit

The one survey respondent exited Cascade Canyon on Cascade Fire Road.

Destination

The one survey respondent did not cite a destination.

Visitor Experience

The one survey respondent rated their experience as great (Figure 3-19).

Issues

Survey respondents cited the following issues when asked if they had accessibility concerns and to provide general comments.

- The survey respondent requested more single track bicycle trails.

Key findings:

- Number of surveys: 1
- Request for more single track trails

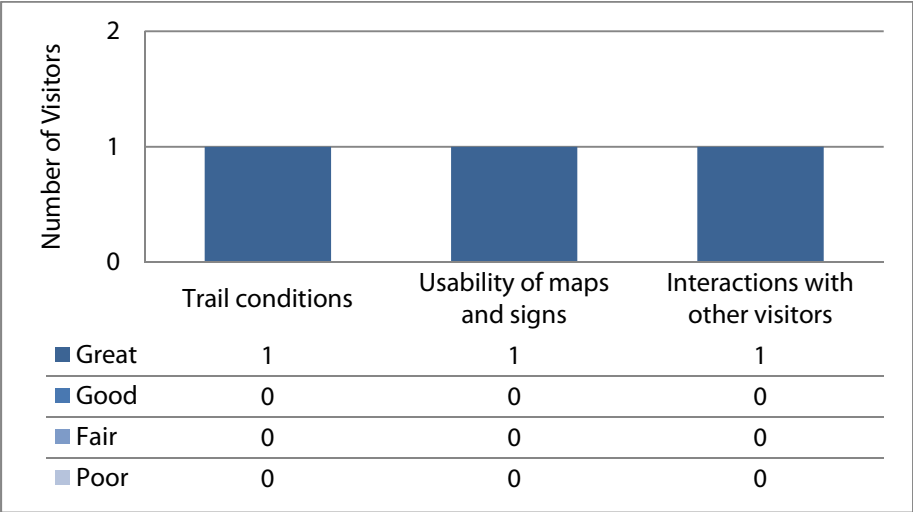


Figure 3-19: Cascade Canyon Visitor Experience

3.5.China Camp State Park

Figure 3-20 presents the count location at China Camp State Park.

3.5.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

China Camp State Park had the eighth highest activity per count period. Volunteers counted 112 visitors (Figure 3-21).

The majority of visitors (64 percent) traveled westbound on Shoreline Trail (Figure 3-22).

Bicyclists

China Camp State Park had the highest bicyclist per visitor ratio (77 percent) among locations where seven or more bicyclists were counted. Volunteers counted 86 bicyclists, the overwhelming majority (78 percent) approached the intersection from the east on Shoreline Trail.

Pedestrians

Volunteers counted 26 pedestrians, which made up 23 percent of activity. Half of pedestrians (50 percent) approached from the west on Shoreline Trail.

Equestrians

No equestrians were counted during three count periods.

Dogs

No dogs were counted at this location.

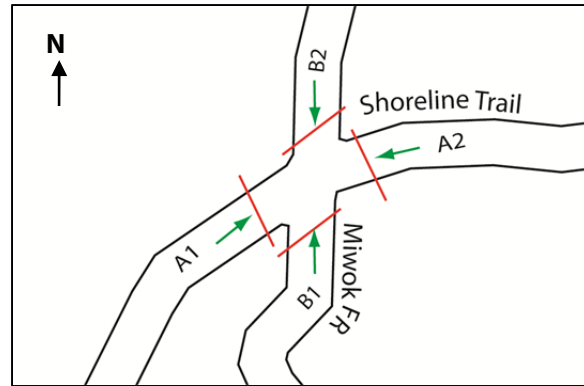


Figure 3-20: China Camp State Park Count Location

Key findings:

- Number of visitors: 112
- Number of dogs: 0
- 77% of visitors were bicyclists
- 23% of visitors were pedestrians
- No equestrians were counted
- 64% of activity was on the east Shoreline Trail approach

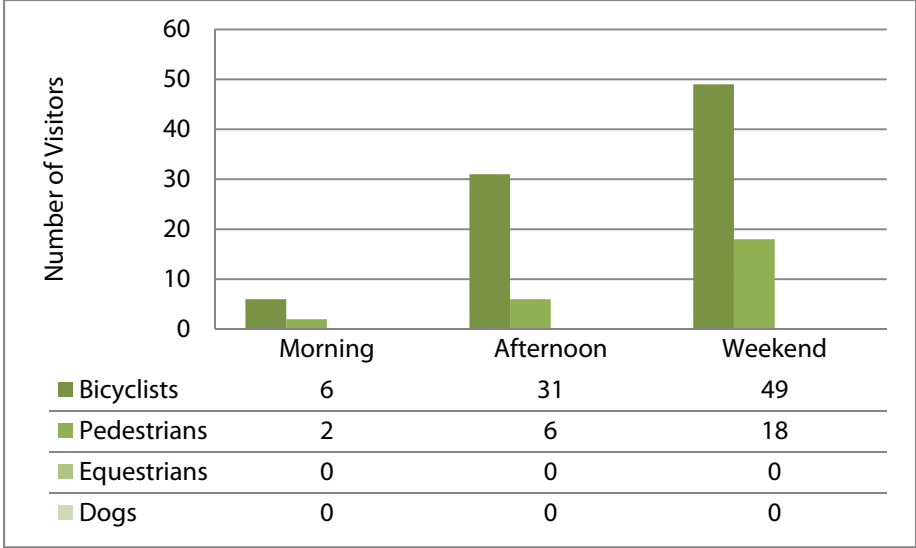


Figure 3-21: China Camp State Park Activity by Time

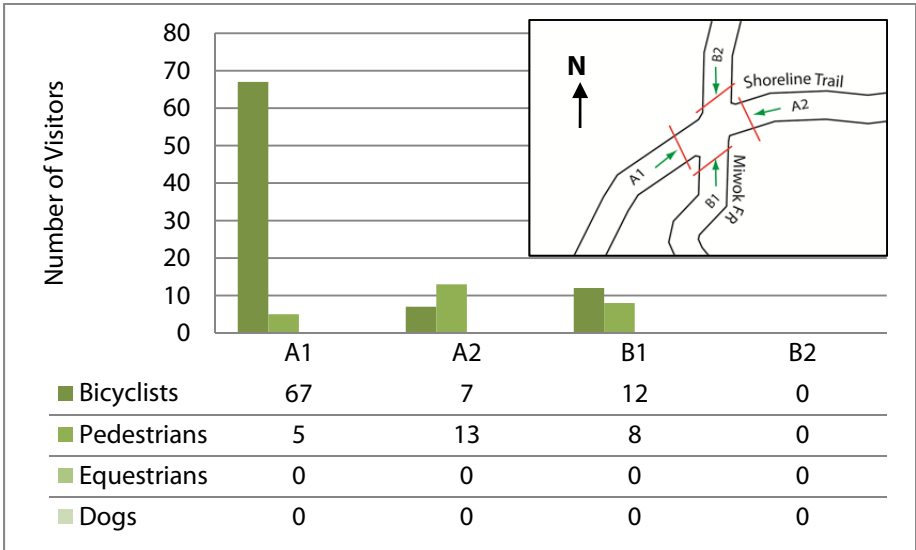


Figure 3-22: China Camp State Park Trail Activity by Direction

3.5.2. Survey Summary

Thirty-two people responded to the survey at China Camp State Park.

Access Mode

The majority of visitors (63 percent) carpooled to China Camp State Park and another 34 percent drove alone (Figure 3-23).

Entrance

Locations where survey respondents entered China Camp State Park are presented below, followed by the number of responses for each location.

- Back Ranch (10)
- San Pedro Road (7)
- San Pedro Mountain (6)
- Miwok at San Pedro Road (4)

Exit

Locations where survey respondents exited China Camp State Park are presented below, followed by the number of responses for each location.

- Back Ranch (9)
- San Pedro Road (7)
- San Pedro Mountain (6)
- Miwok at San Pedro Road (4)

Destination

Popular destinations cited by survey respondents are listed below, followed by the number of responses.

- Shoreline Loop (25)
- Bull Head and Back (2)

Visitor Experience

Most survey respondents rated their experiences as great or good. A few (9 percent) rated the usability of maps and signs as fair (Figure 3-24).

- Trail conditions: Good to great (97 percent)
- Usability of maps and signs: Good to great (90 percent)
- Interaction with other visitors: Good to great (100 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are presented below.

- Too many bicyclists (1)
- Conflict between a wheelchair user and an equestrian on Shoreline (1)

Key findings:

- Number of surveys: 32
- 63% arrived by carpool
- Key entrances/exits:
 - Back Ranch
 - San Pedro Road
 - San Pedro Mountain
 - Miwok at San Pedro Road
- Popular destinations:
 - Shoreline Loop
 - Bull Head and Back
- Visitor experience:
 - 97% good to great trail conditions
 - 90% good to great maps and signs
 - 100% good to great interactions

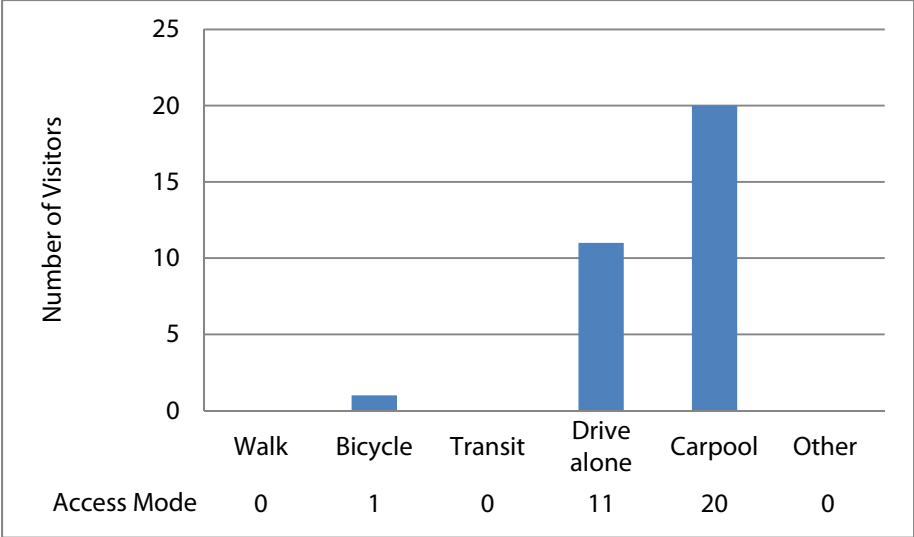


Figure 3-23: China Camp State Park Access Mode

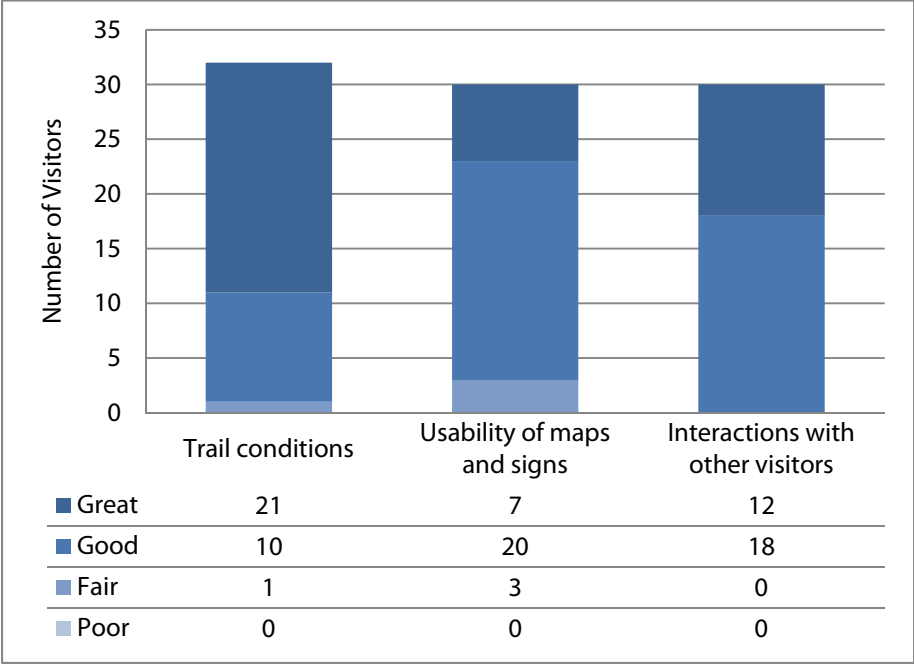


Figure 3-24: China Camp State Park Visitor Experience

3.6. Gary Giacomini Preserve

Figure 3-25 presents the count location at Gary Giacomini.

3.6.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Gary Giacomini had the third lowest visitor activity per count period. Volunteers counted 12 visitors over three count periods (Figure 3-26).

The majority of visitors (75 percent) approached from the south on Hunt Camp. The majority of visitors were bicyclists (Figure 3-27).

Bicyclists

Volunteers counted nine bicyclists, all of but one approached from the south on Hunt Camp.

Pedestrians

Volunteers counted one pedestrian who approached from the north on Hunt Camp.

Equestrians

Two equestrians were counted on the weekend approached from the east on Sylvestris Fire Road.

Dogs

No dogs were counted at this location.

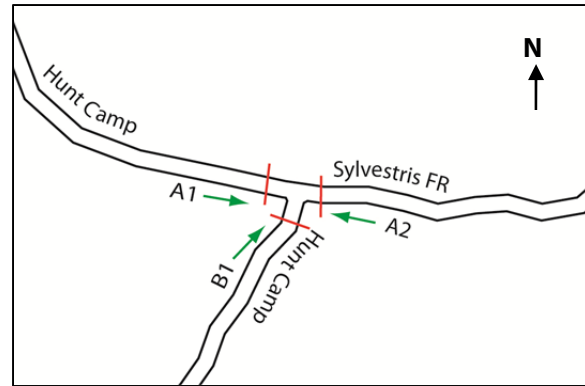


Figure 3-25: Gary Giacomini Count Location

Key findings:

- Number of visitors: 12
- Number of dogs: 0
- 75% of visitors were bicyclists
- 8% of visitors were pedestrians
- 17% of visitors were equestrians
- 75% of activity was from the south approach on Hunt Camp

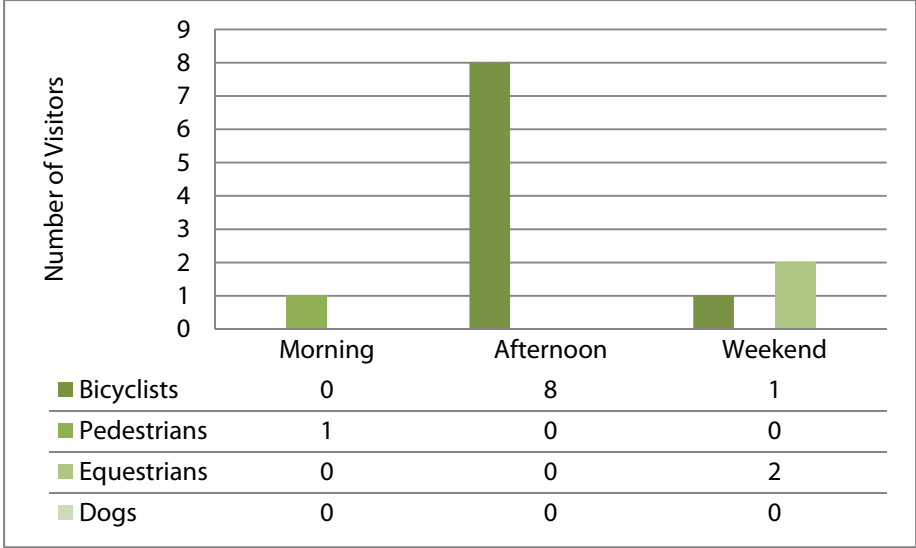


Figure 3-26: Gary Giacomini Activity by Time

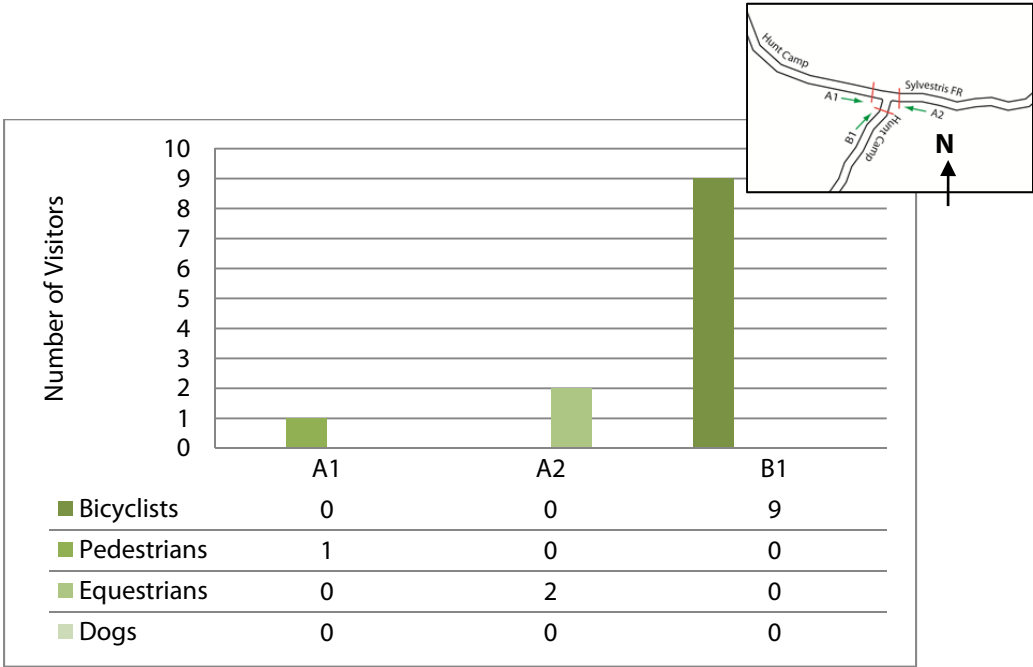


Figure 3-27: Gary Giacomini Trail Activity by Direction

3.6.2. Survey Summary

Six people responded to the survey at Gary Giacomini.

Access Mode Count

The majority of survey respondents (67 percent) drove to Gary Giacomini, either alone or by carpooling (Figure 3-28).

Entrance

Locations where survey respondents entered Gary Giacomini are presented below, followed by the number of response for each.

- Sylvetris at Woodacre (4)
- Sylvestris/Juniper (1)
- Railroad Grade at Mountain Home Inn (1)

Exit

Locations where survey respondents exited Gary Giacomini are presented below, followed by the number of response for each.

- Sylvetris at Woodacre (5)
- Railroad Grade at Mountain Home Inn (1)

Destination

Popular destinations cited by survey respondents are listed below, followed by the number of responses.

- Kent Lake (3)
- Loop (1)

Visitor Experience

Most survey respondents rated their experiences as great or good. Half of the respondents rated the usability of maps and signs as fair or poor (Figure 3-29).

- Trail conditions: Good to great (83 percent)
- Usability of maps and signs: Good to great (50 percent)
- Interactions with other visitors: Good to great (100 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Problems with accessibility for persons with mobility impairments (1)
- Rocks on trails (2)

Key findings:

- Number of surveys: 6
- 67% drove alone or carpoled
- Key entrance/exit:
 - Sylvetris at Woodacre
- Popular destinations:
 - Kent Lake (4)
 - Loop (1)
- Visitor experience:
 - 83% good to great trail conditions
 - 50% good to great maps and signs
 - 100% good to great interactions

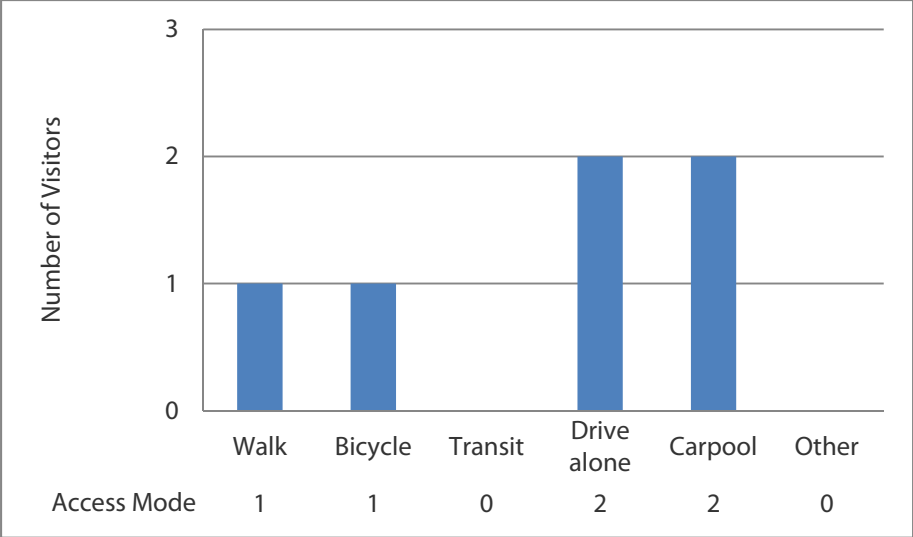


Figure 3-28: Gary Giacomini Access Mode

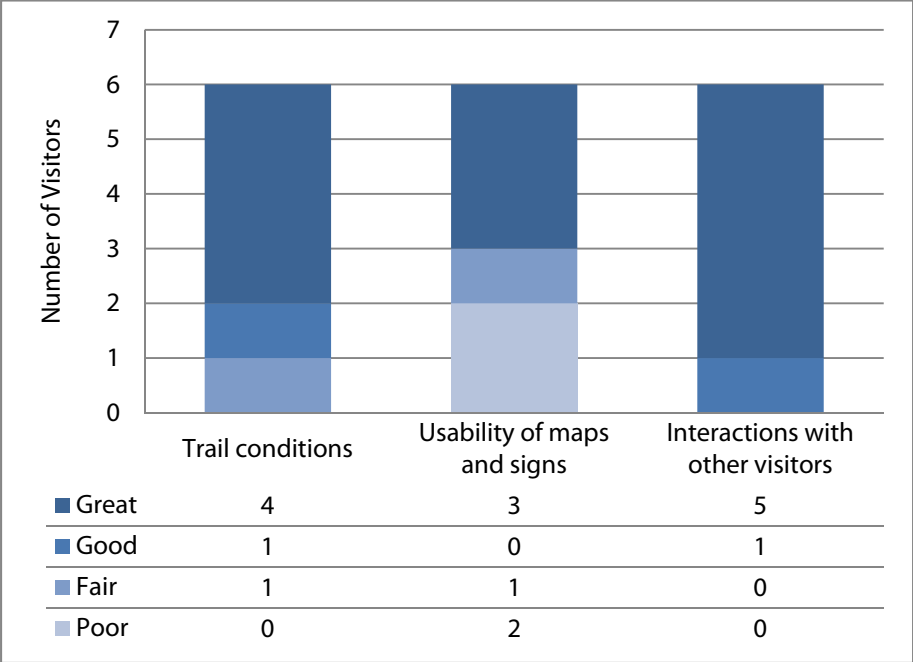


Figure 3-29: Gary Giacomini Visitor Experience

3.7.Indian Valley Preserve

Figure 3-30 presents the count location at Indian Valley.

3.7.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 12:00pm
Saturday, October 1, 2011

Count Summary

Indian Valley had the fourth highest visitor activity per count period. Volunteers counted 220 visitors (Figure 3-31).

The majority of visitors (85 percent) traveled on Indian Valley Fire Road (Figure 3-32).

Bicyclists

Volunteers counted 17 bicyclists, the majority of which (71 percent) approached from the southeast on Indian Valley Fire Road.

Pedestrians

Volunteers counted 202 pedestrians, which made up 92 percent of activity. Half of pedestrians approached from the southeast on Indian Valley Fire Road.

Equestrians

One equestrian was counted on the weekend. The equestrian approached from the southeast on Indian Valley Fire Road.

Dogs

Volunteers counted 76 dogs. Approximately 38 percent of pedestrians walked dogs in Indian Valley.

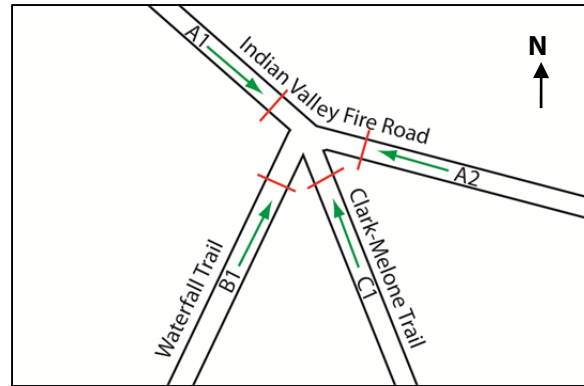


Figure 3-30: Indian Valley Count Location

Key findings:

- Number of visitors: 220
- Number of dogs: 76
- 7% of visitors were bicyclists
- 92% of visitors were pedestrians
- 1 equestrian was counted
- 38% of pedestrians walked with dogs
- 85% of activity was on the east and west Indian Valley Fire Road approach

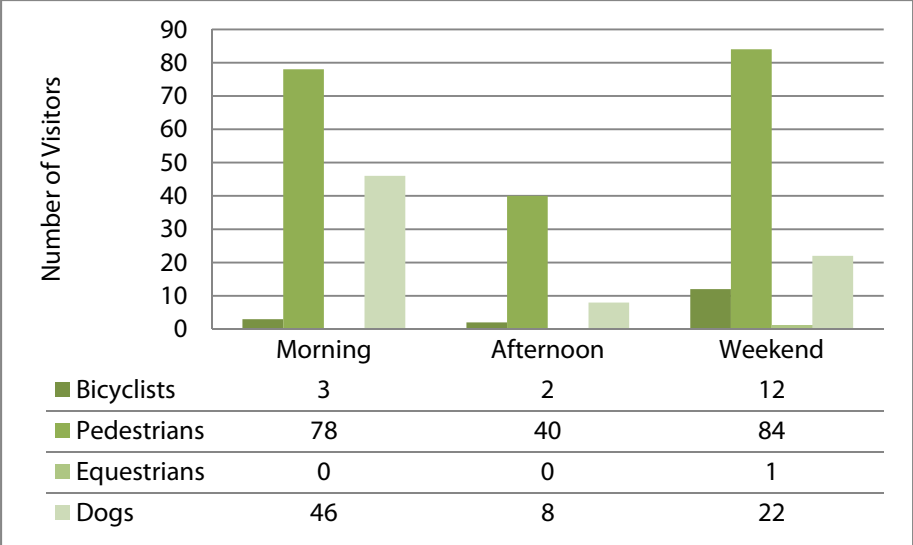


Figure 3-31: Indian Valley Activity by Time

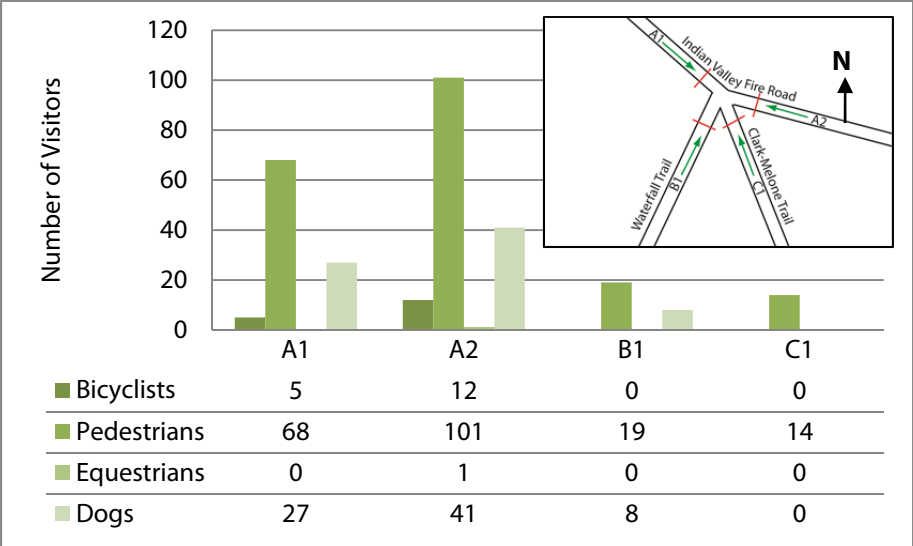


Figure 3-32: Indian Valley Trail Activity by Direction

3.7.2. Survey Summary

Thirty-four people responded to the survey at Indian Valley.

Access Mode

Half of survey respondents drove alone to Indian Valley and another 41 percent carpooled (Figure 3-33).

Entrance

Locations where survey respondents entered Indian Valley are presented below, followed by the number of responses for each location.

- Indian Valley Road (24)
- Indian Valley Campus (9)

Exit

Locations where survey respondents exited Indian Valley are presented below, followed by the number of responses for each location.

- Indian Valley Road (23)
- Indian Valley Campus (9)

Destination

Popular preserve destinations cited by survey respondents are listed below, followed by the number of responses.

- Indian Valley Road (11)
- Fire Road (7)
- Indian Valley Campus (6)
- Waterfall (4)

Visitor Experience

Most survey respondents rated their experience as great or good. Fifteen percent rated the usability of maps and signs as fair (Figure 3-34).

- Trail conditions: Good to great (94 percent)
- Usability of maps and signs: Good to great (75 percent)
- Interactions with other visitors: Good to great (97 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The comment comments are listed below.

- Dog waste (1)
- Off-leash dogs (2)
- Horse waste (2)

Key findings:

- Number of surveys: 34
- 50% arrived by driving alone
- 41% arrived by carpooling
- Key entrance/exit:
 - Indian Valley Road
- Popular destinations:
 - Indian Valley Road
 - Fire Road
- Visitor experience:
 - 94% good to great trail conditions
 - 75% good to great maps and signs
 - 97% good to great interactions

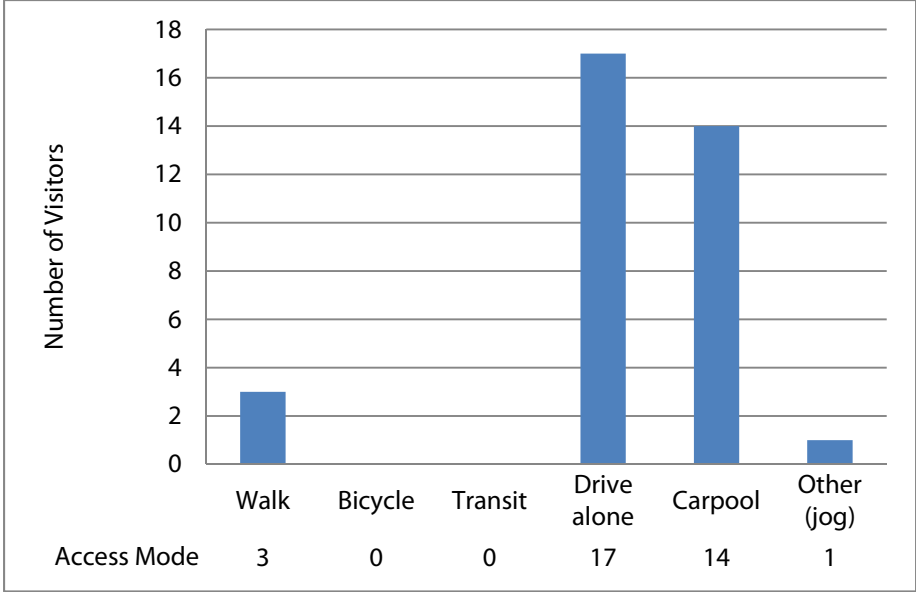


Figure 3-33: Indian Valley Access Mode

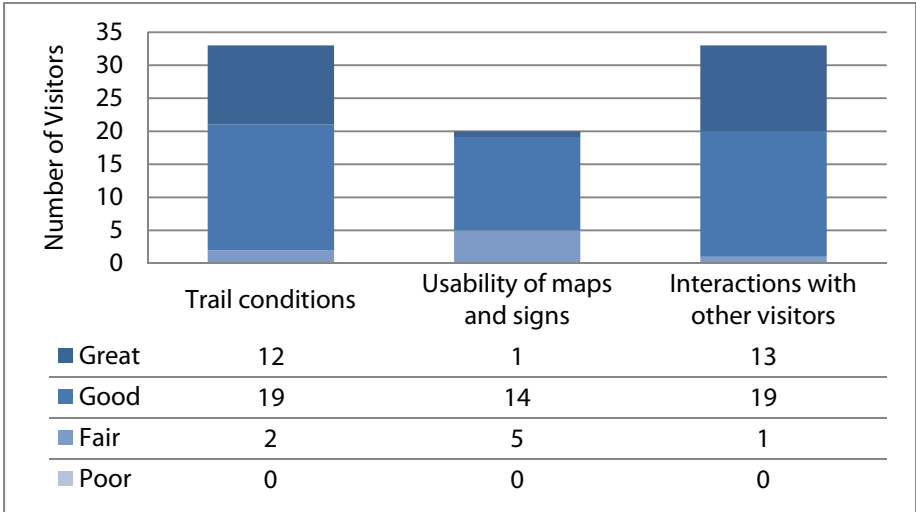


Figure 3-34: Indian Valley Visitor Experience

3.8. Mount Burdell Preserve

Figure 3-35 presents the count location at Mount Burdell.

3.8.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Volunteers counted 111 visitors. Mount Burdell had the sixth highest visitor activity per count period (Figure 3-36).

A roughly equal number of visitors approached the count location from each direction (Figure 3-37).

Bicyclists

Volunteers counted 16 bicyclists, half of which approached from Big Tank Fire Road.

Pedestrians

Volunteers counted 93 pedestrians, which made up 84 percent of activity. Roughly the same number of pedestrians approached the count location from each direction.

Equestrians

Two equestrians were counted during the morning count period. Both approached from the north on San Andreas Fire Road.

Dogs

Volunteers counted 36 dogs. Approximately 39 percent of pedestrians walked with dogs, the fourth highest rate of pedestrians with dogs at locations with 10 or more dogs. A roughly equal number of dogs approached the count location from each direction.

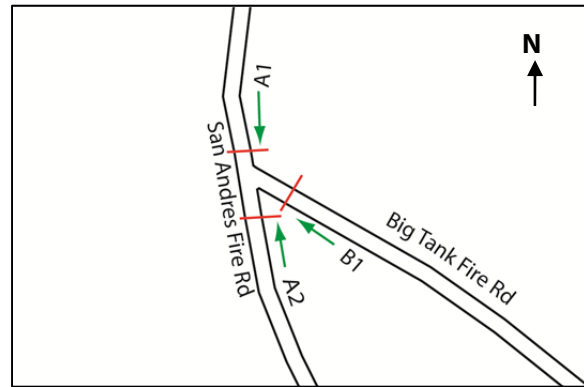


Figure 3-35: Mount Burdell Count Location

Key findings:

- Number of visitors: 111
- Number of dogs: 36
- 14% of visitors were bicyclists
- 84% of visitors were pedestrians
- 2 equestrians were counted
- 39% of pedestrians walked with dogs
- Activity volume nearly identical on all approaches

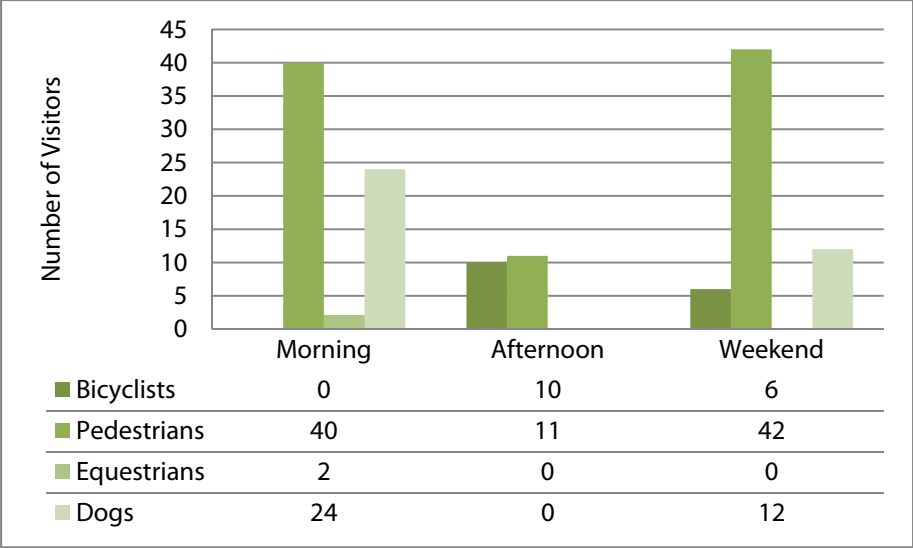


Figure 3-36: Mount Burdell Activity by Time

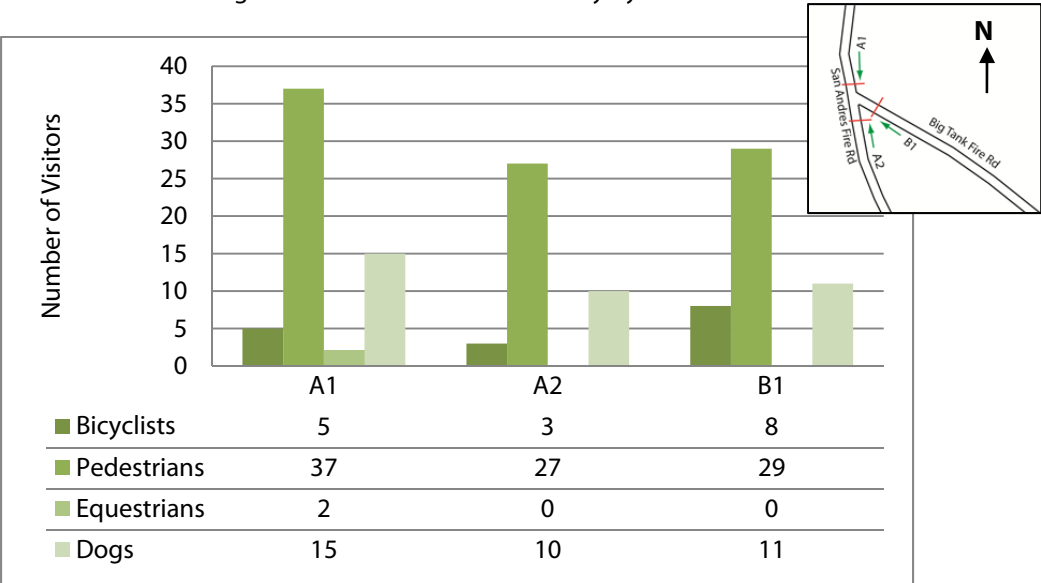


Figure 3-37: Mount Burdell Trail Activity by Direction

3.8.2. Survey Summary

Thirty-nine people responded to the survey at Mount Burdell.

Access Mode

The majority of survey respondents (64 percent) drove alone to Mount Burdell (Figure 3-38)

Entrance

Locations where survey respondents entered Mount Burdell are presented below, followed by the number of responses for each location.

- Gate (21)
- San Andreas (11)

Exit

Locations where survey respondents exited Mount Burdell are presented below, followed by the number of responses for each location.

- Gate (16)
- San Andreas (11)

Destination

Popular preserve destinations cited by survey respondents are listed below, followed by the number of responses.

- Loop (13)
- Mt Burdell (5)
- Deer Camp (4)
- Out and Back (4)

Visitor Experience

Most survey respondents rated their experience as great or good.

- Trail conditions: Good to great (97 percent)
- Usability of maps and signs: Good to great (70 percent)
- Interactions with other visitors (82 percent)

Fifteen percent rated the usability of maps and signs as fair or poor and 15 percent rated their interactions with other visitors as fair or poor (Figure 3-39).

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Dog waste (3)
- Need improve sign visibility (3)
- Off-leash dogs (2)
- Horse waste (2)

Key findings:

- Number of surveys: 39
- 64% arrived by driving alone
- 15% arrived by carpool
- Key entrances/exits:
 - Gate
 - San Andreas
- Popular destinations:
 - Loop
 - Mt Burdell
- Visitor experience:
 - 97% good to great trail conditions
 - 70% good to great maps and signs
 - 82% good to great interactions

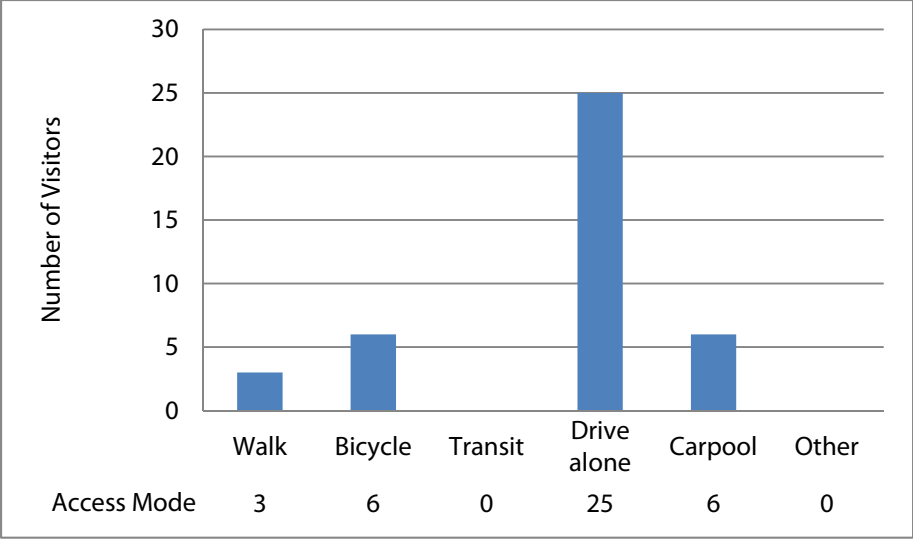


Figure 3-38: Mount Burdell Access Mode

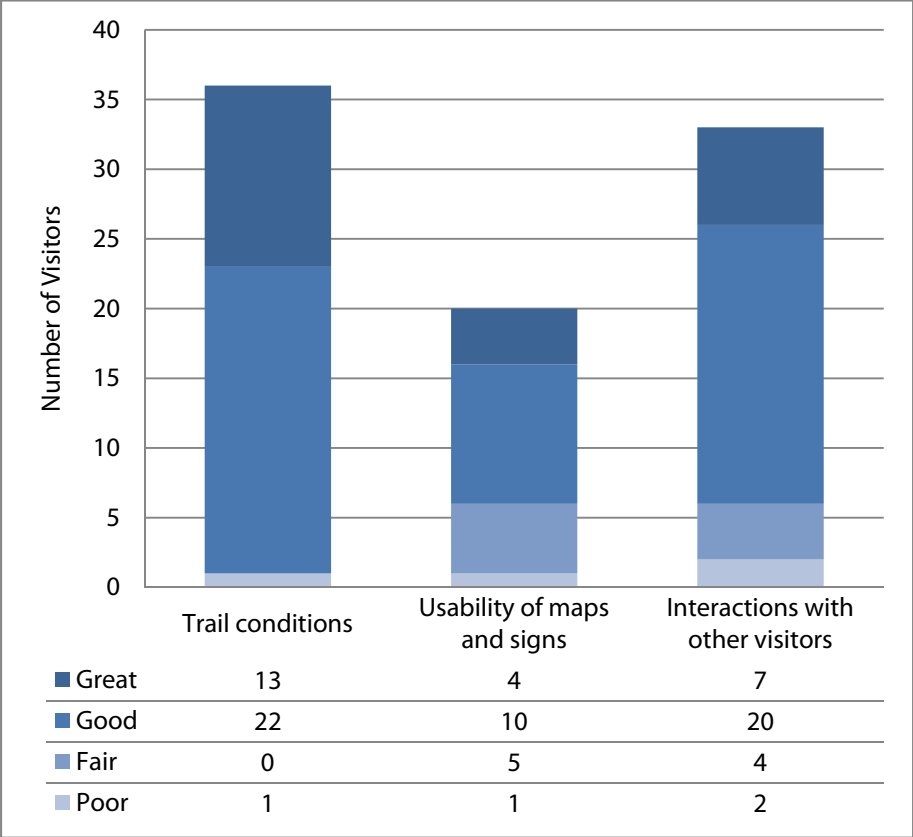


Figure 3-39: Mount Burdell Visitor Experience

3.9. Ring Mountain Preserve

Figure 3-40 presents the count location at Ring Mountain.

3.9.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Ring Mountain had the ninth highest visitor activity per count period. Volunteers counted 39 visitors (Figure 3-41).

Most (62 percent) visitors approached from the east and west on Ring Mountain Fire Road (Figure 3-42).

Bicyclists

No bicyclists were counted at this location.

Pedestrians

Volunteers counted 29 pedestrians, 100 percent visitor activity. While roughly the same number of pedestrians approached the count location from each direction, slightly more (37 percent) traveled eastbound on Ring Mountain Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted nine dogs. 31 percent of Ring Mountain pedestrians were walking dogs.

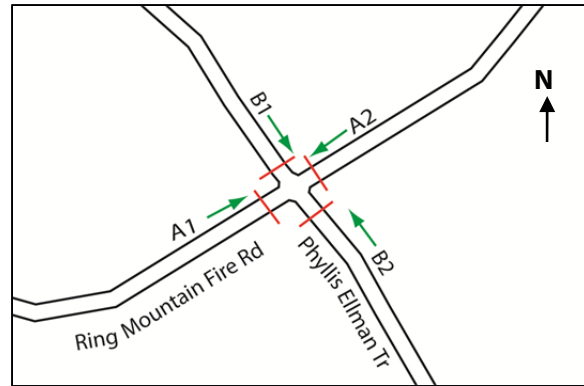


Figure 3-40: Ring Mountain Count Location

Key findings:

- Number of visitors: 29
- Number of dogs: 9
- 100% of visitors were pedestrians
- 37% of pedestrians traveled eastbound on Ring Mountain Fire Road
- 31% of pedestrians had dog
- No bicyclists or equestrians were counted

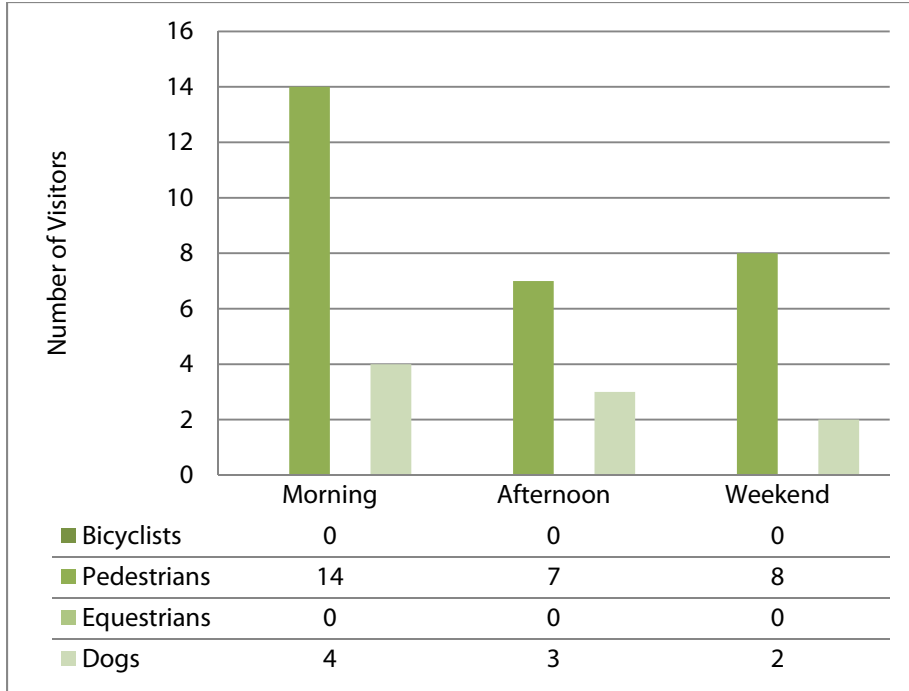


Figure 3-41: Ring Mountain Activity by Time

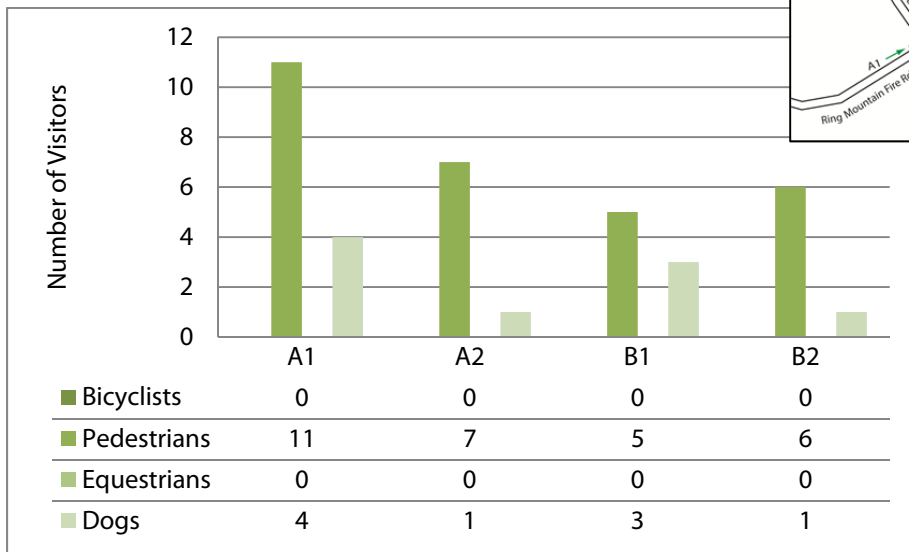


Figure 3-42: Ring Mountain Trail Activity by Direction

3.9.2. Survey Summary

Eighteen people responded to the survey at Ring Mountain and reported the following issues.

Access Mode

The majority of survey respondents (61 percent) walked to Ring Mountain and the remaining respondents drove alone (Figure 3-43).

Entrance

Locations where survey respondents entered Ring Mountain are presented below, followed by the number of responses for each location.

- Phyllis Ellman (4)
- Taylor (3)
- Endeavor (2)
- Trestle Glen (2)

Exit

Locations where survey respondents exited Ring Mountain are presented below, followed by the number of responses for each location.

- Taylor (3)
- Trestle Glen (2)

Destination

Popular destinations cited by survey respondents are listed below, followed by the number of responses.

- Loop (14)
- Endeavor to Westward (1)
- Water tower (1)
- View spot (1)

Visitor Experience

Most survey respondents rated their experience as good. A substantial percent (34 percent) of respondents rated the usability of maps and signs as fair or poor (Figure 3-44).

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs: Good to great (61 percent)
- Interactions with other visitors: Good to great (93 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Off-leash dogs (5)
- Dog waste (1)

Key findings:

- Number of surveys: 18
- 61% arrived by walking
- Key entrances/exits:
 - Phyllis Ellman
 - Taylor
 - Endeavor
 - Trestle Glen
- Popular destinations:
 - Loop
- Visitor experience:
 - 100% good to great trail conditions
 - 61% good to great maps and signs
 - 93% good to great interactions
- Westward (2)
- Phyllis Ellman (2)

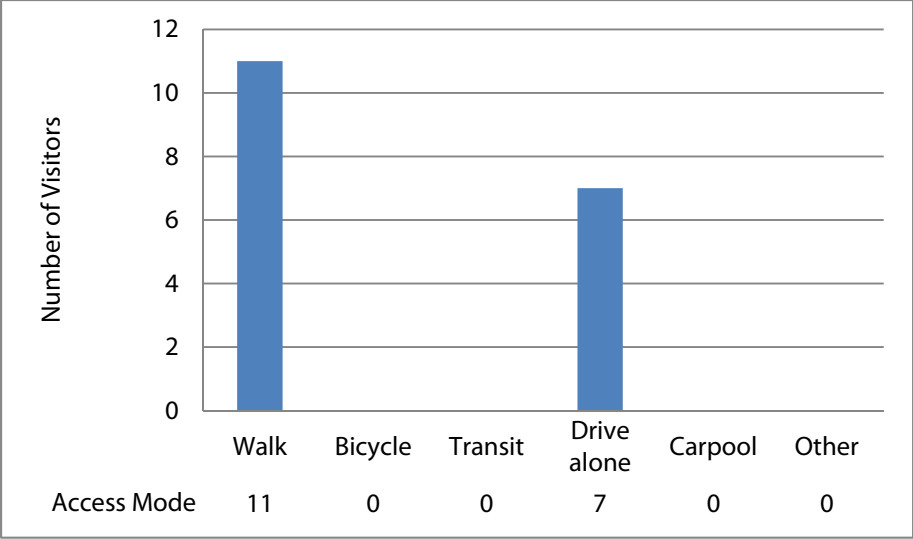


Figure 3-43: Ring Mountain Access Mode

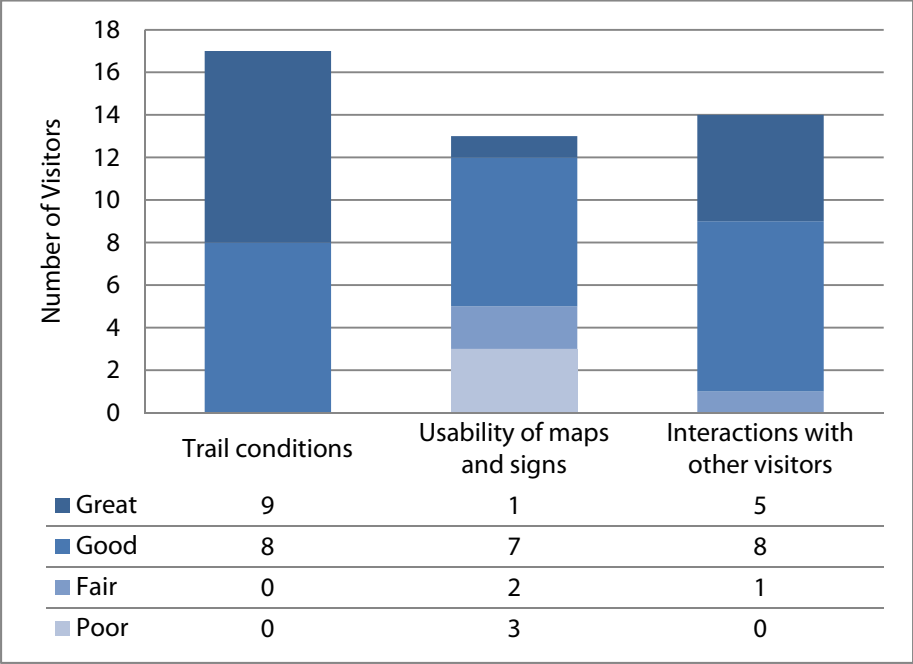


Figure 3-44: Ring Mountain Visitor Experience

3.10. Roy's Redwoods Preserve

Figure 3-45 presents the count location at Roy's Redwoods.

3.10.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Roy's Redwoods had the second lowest visitor activity per count period. Volunteers counted 8 visitors (Figure 3-46). Over half of visitors (55 percent) traveled northbound on Meadow Trail (Figure 3-47).

Bicyclists

No bicyclists were counted at this location.

Pedestrians

Volunteers counted eight pedestrians. Half of pedestrians approached from the south on Meadow Trail, the others approached from the east and west. No pedestrians approached from the north on Meadow Trail during either count period.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted three dogs. Approximately 38 percent of pedestrian walked with dogs in Roy's Redwoods.

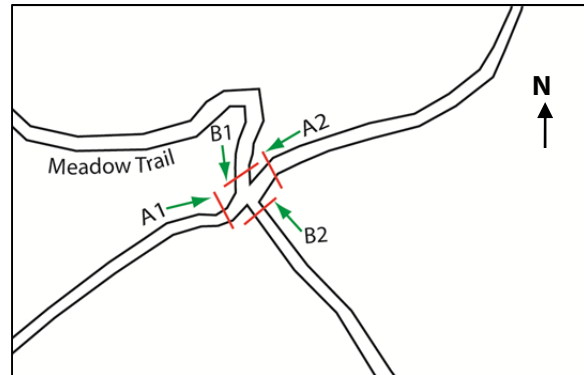


Figure 3-45: Roy's Redwoods Count Location

Key findings:

- Number of visitors: 8
- Number of dogs: 3
- 100% of visitors were pedestrians
- No bicyclists or equestrians were counted
- 38% of pedestrians walked with dogs

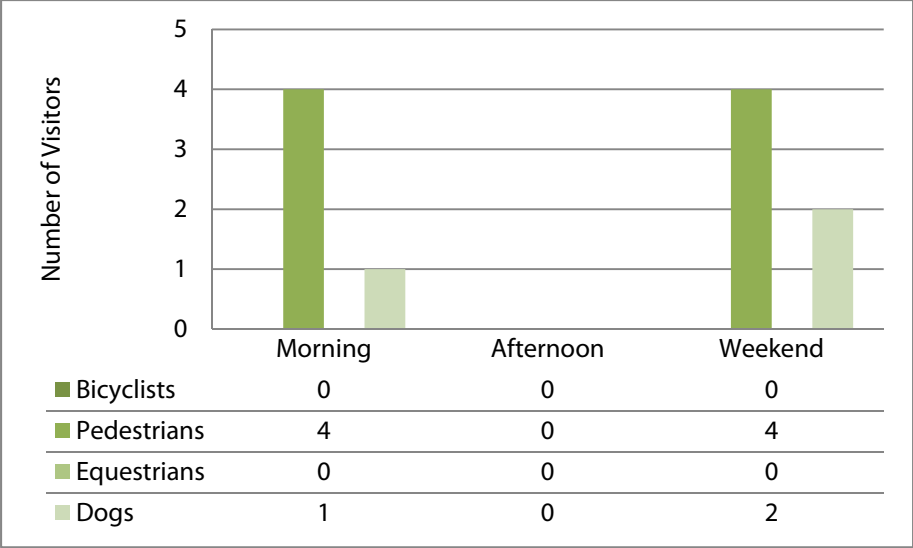


Figure 3-46: Roy's Redwoods Activity by Time

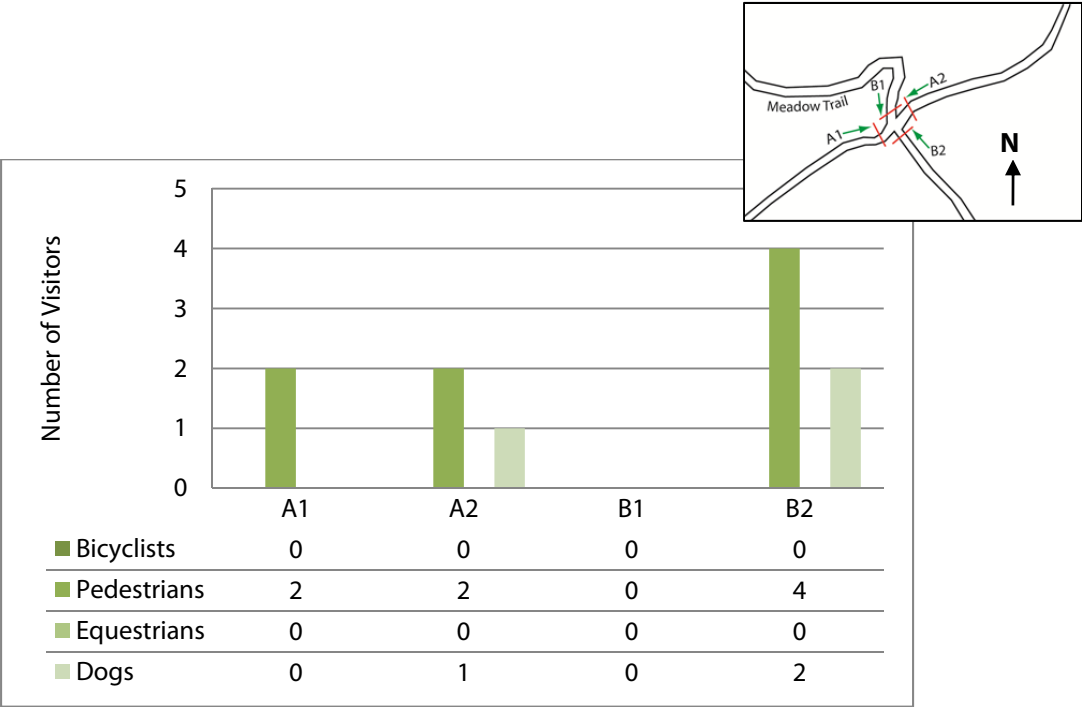


Figure 3-47: Roy's Redwoods Trail Activity by Direction

3.10.2. Survey Summary

Five people responded to the survey at Roy's Redwoods.

Access Mode Count

The majority of survey respondents (80 percent) drove alone or carpoled to Roy's Redwoods and the remaining respondent walked (Figure 3-48).

Entrance

All survey respondents entered Roy's Redwoods at Nicasio Valley Road.

Exit

All survey respondents exited Roy's Redwoods at Nicasio Valley Road.

Destination

The only recorded destination was the Dickson Ridge.

Visitor Experience

All but one survey respondent rated their experiences as great or good (Figure 3-49).

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs: Good to great (75 percent)
- Interactions with other visitors: Good to great (100 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments.

- Meadow should be trimmed more often because of ticks (1)

Key findings:

- Number of surveys: 5
- 80% arrived by driving alone or by carpool
- Entrance/exit:
 - Nicasio Valley Road
- Destination:
 - Dickson Ridge
- Visitor experience:
 - 100% good to great trail conditions
 - 75% good to great maps and signs
 - 100% good to great interactions

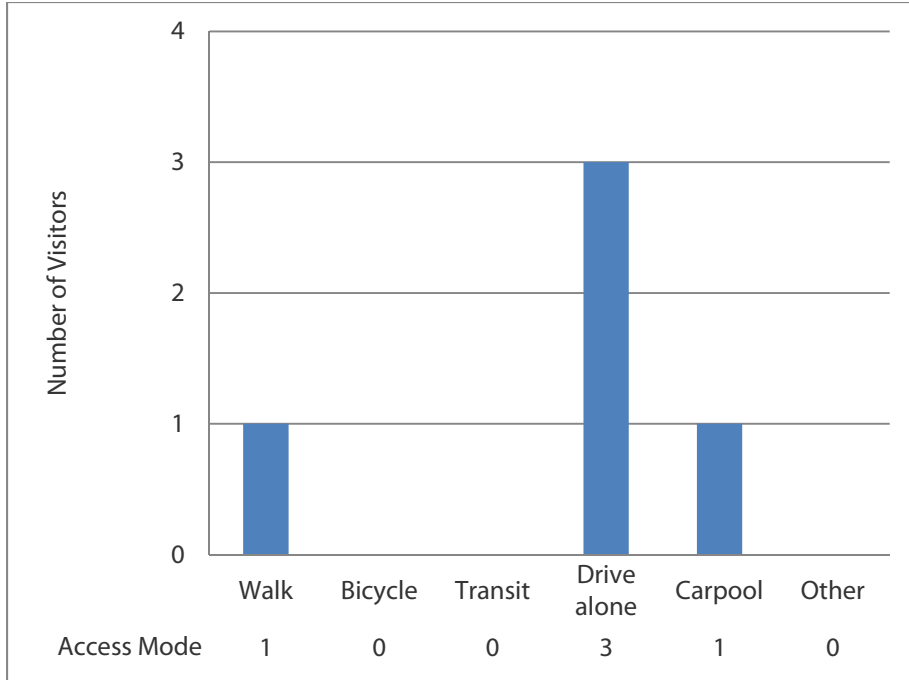


Figure 3-48: Roy's Redwoods Access Mode

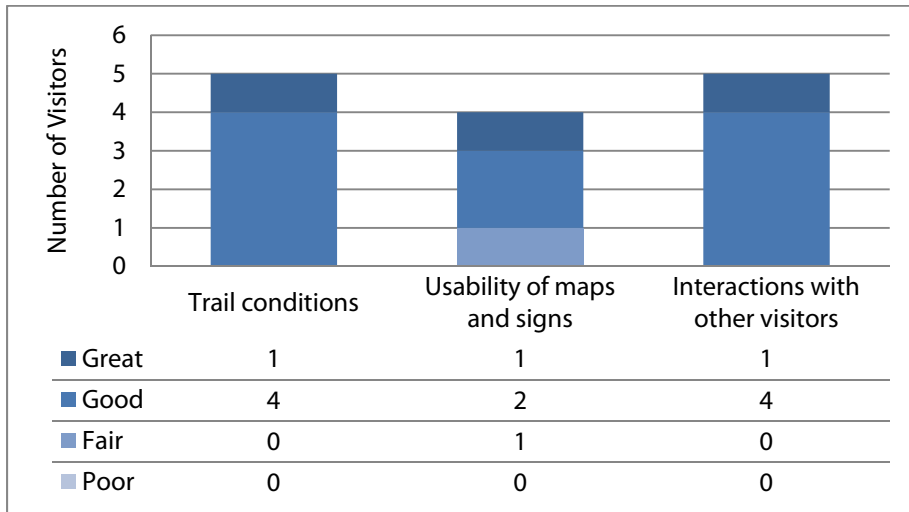


Figure 3-49: Roy's Redwoods Visitor Experience

3.11. Rush Creek Preserve

Figure 3-50 presents the count location at Rush Creek.

3.11.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

Count Summary

Rush Creek had the seventh highest visitor activity per count period. Volunteers counted 65 visitors (Figure 3-51). The majority of visitors (70 percent) traveled on northbound Pinheiro Fire Road (Figure 3-52).

Bicyclists

Volunteers counted 15 bicyclists, the majority (70 percent) of which approached from the south on Pinheiro Fire Road.

Pedestrians

Volunteers counted 50 pedestrians during two count periods. The majority of pedestrians (70 percent) approached from the south on Pinheiro Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted 11 dogs during two count periods. 22 percent of pedestrians walked dogs at Rush Creek. The majority of dogs (82 percent) were counted in the morning approached from the south on Pinheiro Fire Road.

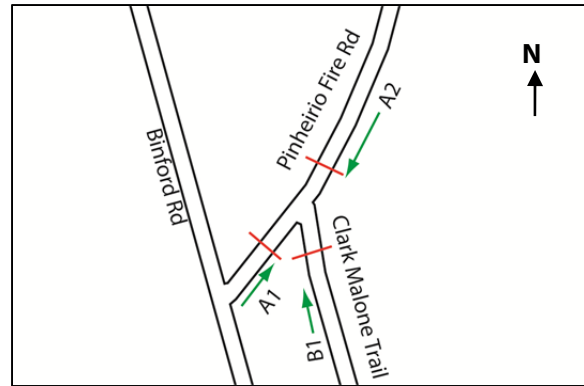


Figure 3-50: Rush Creek Count Location

Key findings:

- Number of visitors: 65
- Number of dogs: 11
- 23% of visitors were bicyclists
- 77% of visitors were pedestrians
- No equestrians were counted
- 22% of pedestrians walked with dogs
- 70% of activity approached from the south on Pinheiro Fire Road

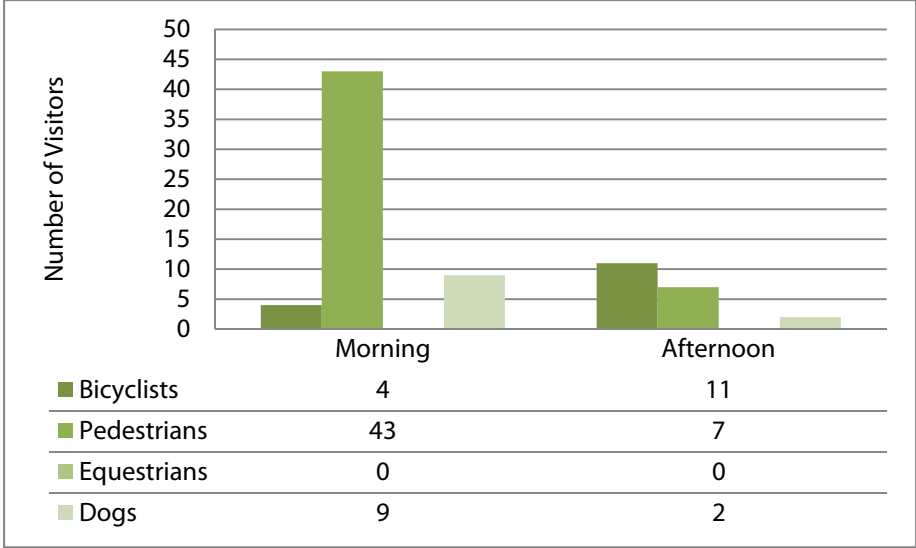


Figure 3-51: Rush Creek Activity by Time

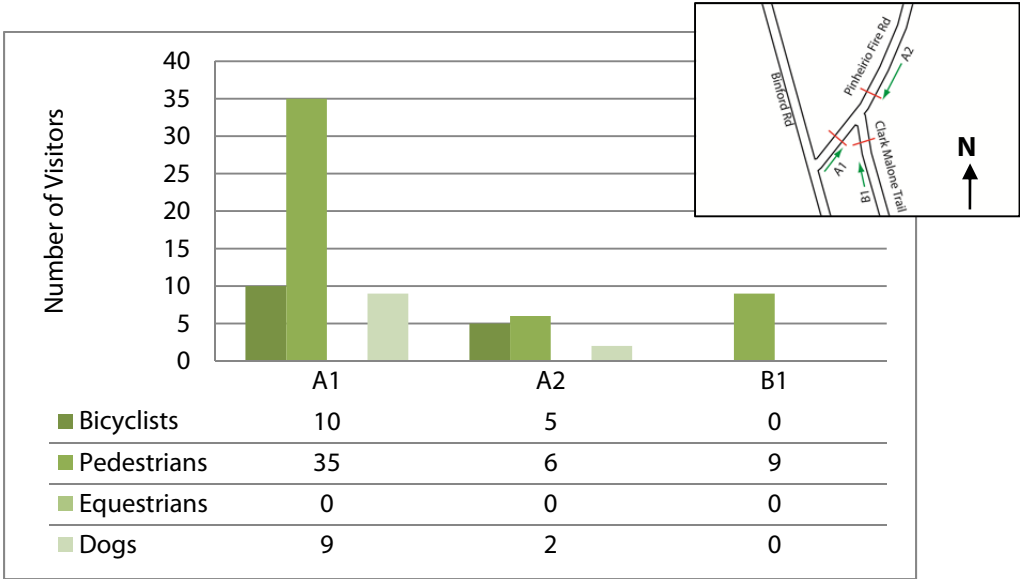


Figure 3-52: Rush Creek Trail Activity by Direction

3.11.2. Survey Summary

Thirty-eight people responded to the survey at Rush Creek.

Access Mode

The majority of survey respondents (63 percent) drove alone to Rush Creek (Figure 3-53).

Entrance

All but one survey respondent entered Rush Creek at Binford Road.

Exit

All but two survey respondents exited Rush Creek at Binford Road. Those two survey respondents exited at the cemetery.

Destination

Popular destinations cited by survey respondents are listed below, followed by the number of responses.

- Loop (27)
- Bahia (4)
- Cemetery Marsh (3)

Visitor Experience

The majority of survey respondents rated their experiences as great or good. A small percent (8 percent) of respondents rated the usability of maps and signs as fair or poor (Figure 3-54).

- Train conditions: Good to great (95 percent)
- Usability of maps and signs: Good to great (91 percent)
- Interactions with other visitors: Good to great (100 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Maintenance issues including dead trees, poison oak and impassable trails in the winter (4)
- Maps and signs need improvement (2)
- Dog waste (1)
- Horse waste (1)

Key findings:

- Number of surveys: 38
- 63% arrived by driving alone
- 21% arrived by bicycle
- Key entrance/exit:
 - Rush Creek at Binford Road
- Popular destinations:
 - Loop (27)
 - Bahia (4)
 - Cemetery Marsh (3)
- Visitor experience:
 - 95% good to great trail conditions
 - 71% good to great maps and signs
 - 100% good to great interactions

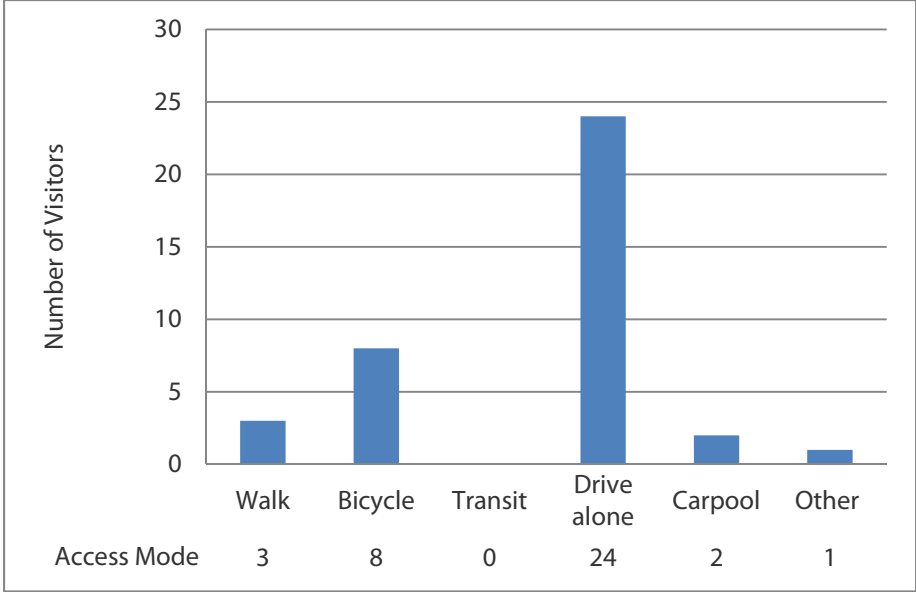


Figure 3-53: Rush Creek Access Mode Count

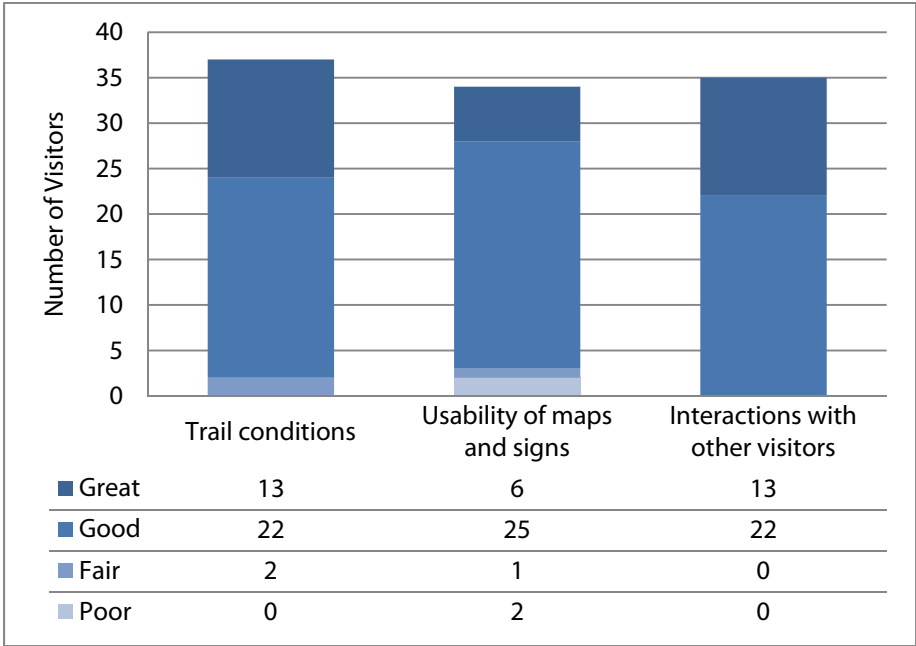


Figure 3-54: Rush Creek Visitor Experience

3.12. San Pedro Mountain Preserve

Figure 3-55 presents the count location at San Pedro Mountain.

3.12.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

San Pedro Mountain had the fourth lowest visitor activity. Volunteers counted 11 visitors during three count periods (Figure 3-56).

The majority of visitors (73 percent) approached from the north on San Pedro Ridge Road (Figure 3-57).

Bicyclists

Volunteers counted two bicyclists, both on the weekend, who approached from the north on San Pedro Ridge Fire Road.

Pedestrians

Volunteers counted nine pedestrians, the majority (82 percent) approached from the north on San Pedro Ridge Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted six dogs. Approximately 67 percent of pedestrians walked with dogs and all but one approached from the north on San Pedro Ridge Fire Road.

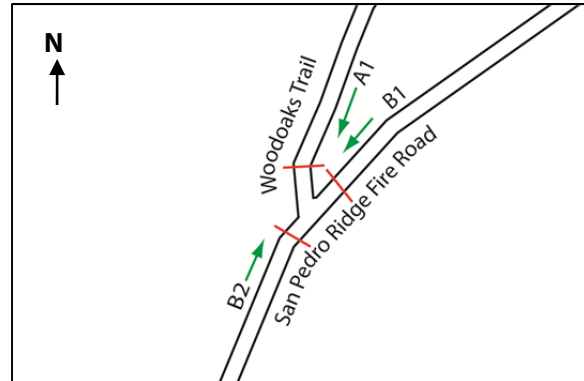


Figure 3-55: San Pedro Mountain Count Location

Key findings:

- Number of visitors: 11
- Number of dogs: 6
- 18% of visitors were bicyclists
- 82% of visitors were pedestrians
- No equestrians were counted
- 67% of pedestrians walked with dog
- 73% of activity was on the north approach on San Pedro Ridge Fire Road

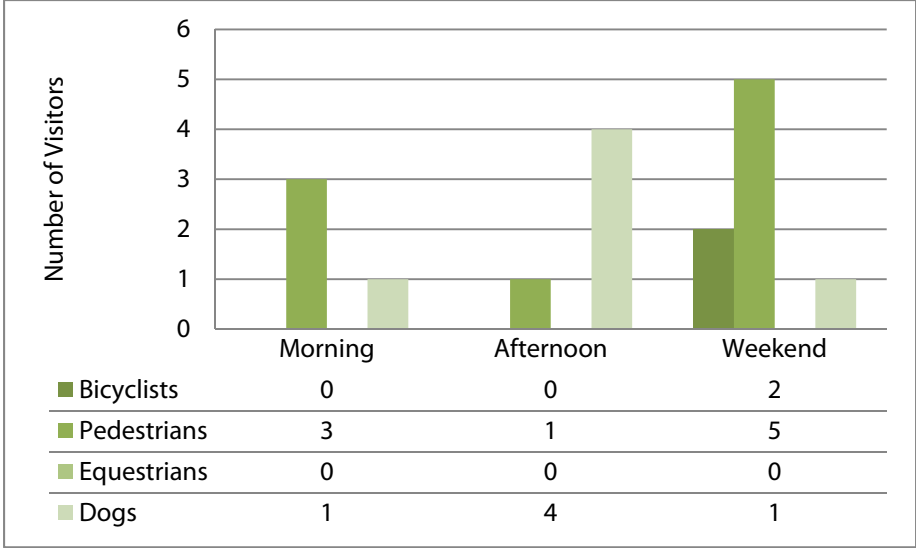


Figure 3-56: San Pedro Mountain Activity by Time

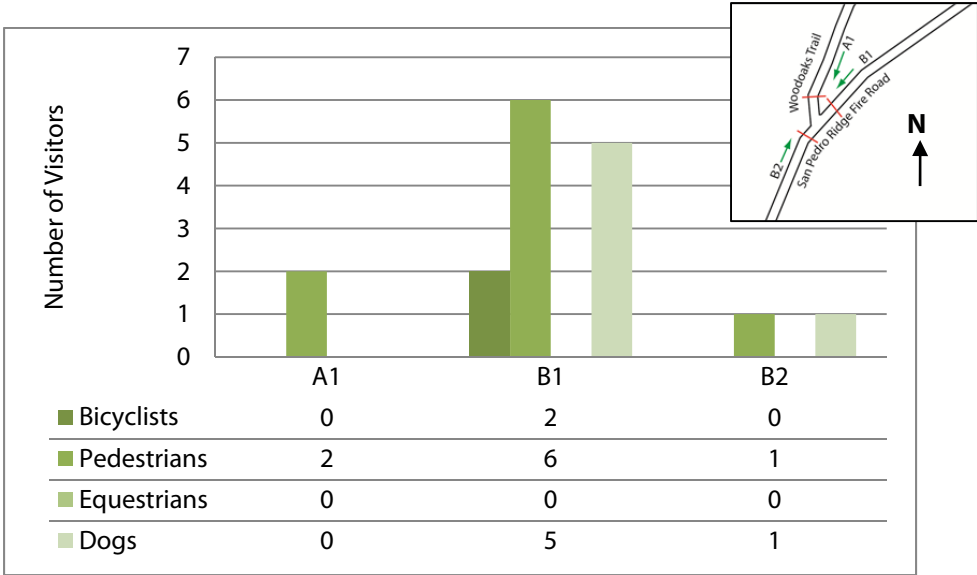


Figure 3-57: San Pedro Mountain Trail Activity by Direction

3.12.2. Survey Summary

Ten people responded to the survey at San Pedro Mountain.

Access Mode

An equal percent of survey respondents (40 percent) drove alone or walked to San Pedro Mountain (Figure 3-58).

Entrance

Locations where survey respondents entered are presented below, followed by the number of responses for each location.

Visitors entered from many locations.

- Woodside Street (2)
- Aubury Oaks Drive (1)
- Scettrini/Aquinas (1)
- Ridgewood (1)
- Dominican (1)
- Civic Center (1)
- Sunny Oaks (1)
- Hacienda Court (1)
- Pominus (1)

Exit

Locations where survey respondents exited San Pedro Mountain are presented below, followed by the number of responses for each location. Visitors left from many locations.

- San Pablo Drive (3)
- San Venetia (1)
- Hacienda Court (1)
- Scettrini/Aquinas (1)
- North San Pedro Road (1)
- Ridgewood (1)

Destination

Popular preserve destinations cited by survey respondents are listed below, followed by the number of responses.

- Jewish Community Center (3)
- Santa Venetia Market (2)

Visitor Experience

Overall, visitors rated their experiences great or good. Almost half (40 percent) rated the usability of maps and signs as fair or poor (Figure 3-59).

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs: Good to great (60 percent)
- Interactions with other visitors: Good to great (100 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are listed below.

- Cars block park entrance at Hacienda Way (1)

Key findings:

- Number of surveys: 10
- 40% arrived by driving alone
- 40% arrived by walking
- Key entrance/exit:
 - Many
- Popular destinations:
 - Jewish Community Center
 - Santa Venetia Market
- Visitor experience:
 - 100% good to great trail conditions
 - 60% good to great maps and signs
 - 100% good to great interactions

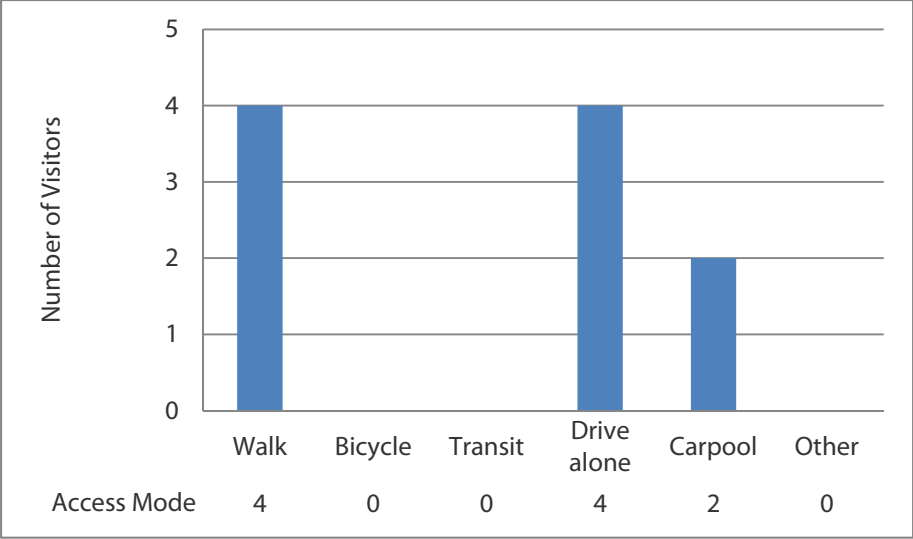


Figure 3-58: San Pedro Access Mode

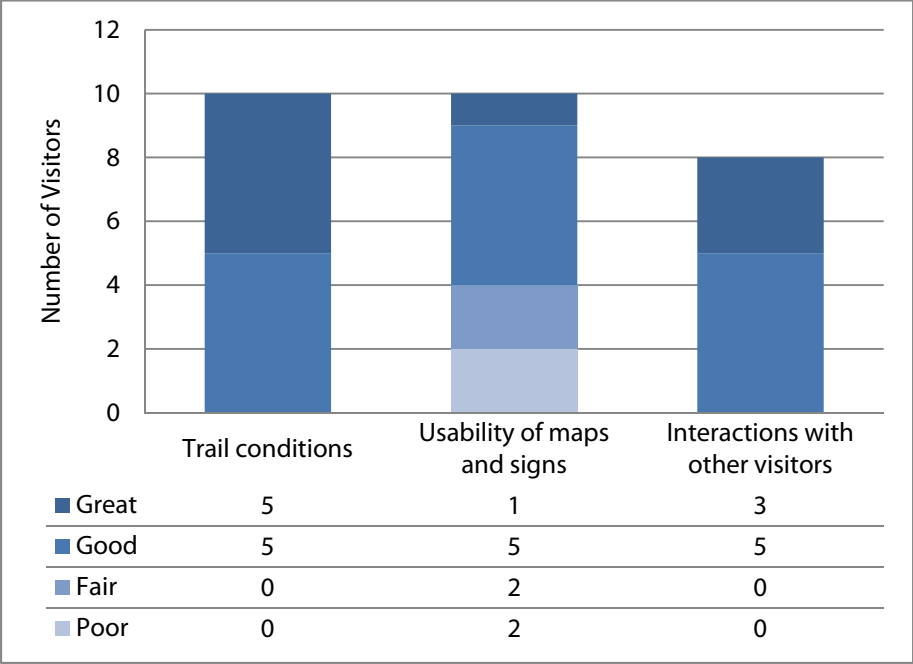


Figure 3-59: San Pedro Visitor Experience

3.13. Terra Linda / Sleepy Hollow Preserve

Figure 3-60 presents the count location at Terra Linda/Sleepy Hollow.

3.13.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

Terra Linda/Sleepy Hollow had the fifth highest visitor activity per count period. Volunteers counted 106 visitors (Figure 3-61).

A roughly equal number of visitors approached the count location from each direction, with the most visitors (43 percent) coming from the south (Figure 3-62).

Bicyclists

Volunteers counted two bicyclists in the morning on Ridgewood Fire Road.

Pedestrians

Volunteers counted 104 pedestrians, which made up 98 percent of visitor activity. A roughly equal number of pedestrians approached the count location from each direction.

Equestrians

No equestrians were counted at this location.

Dogs

Volunteers counted 50 dogs. Terra Linda/Sleepy Hollow had the third highest percentage of pedestrians with dogs (48 percent) among locations where 10 or more dogs were counted.

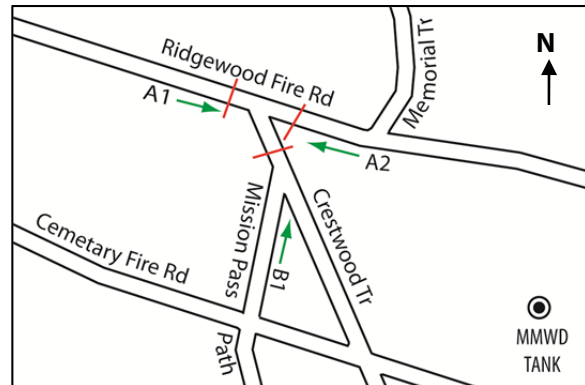


Figure 3-60: Terra Linda/Sleep Hollow Count Location

Key findings:

- Number of visitors: 106
- Number of dogs: 50
- 2% of visitors were bicyclists
- 98% of visitors were pedestrians
- No equestrians were counted
- 48% of pedestrians walked with dogs
- Activity was comparable on the three approaches

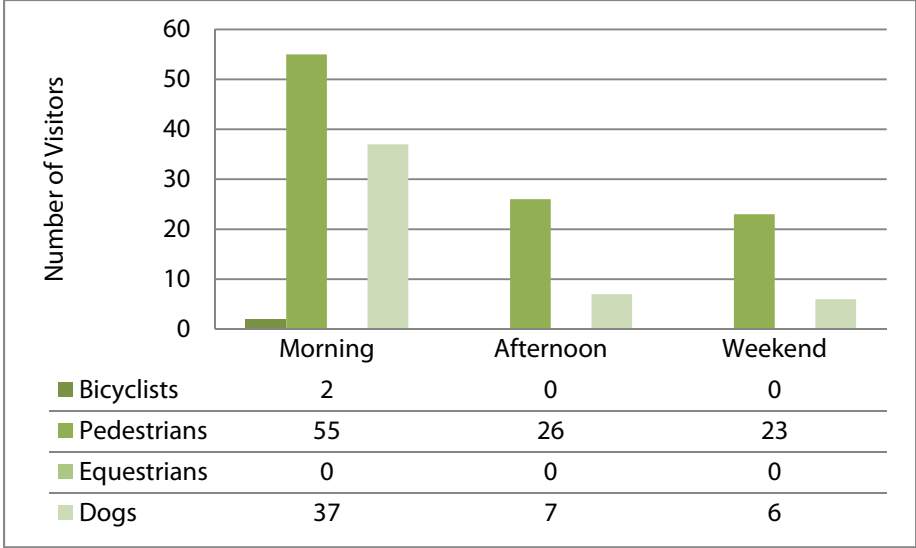


Figure 3-61: Terra Linda/Sleepy Hollow Activity by Time

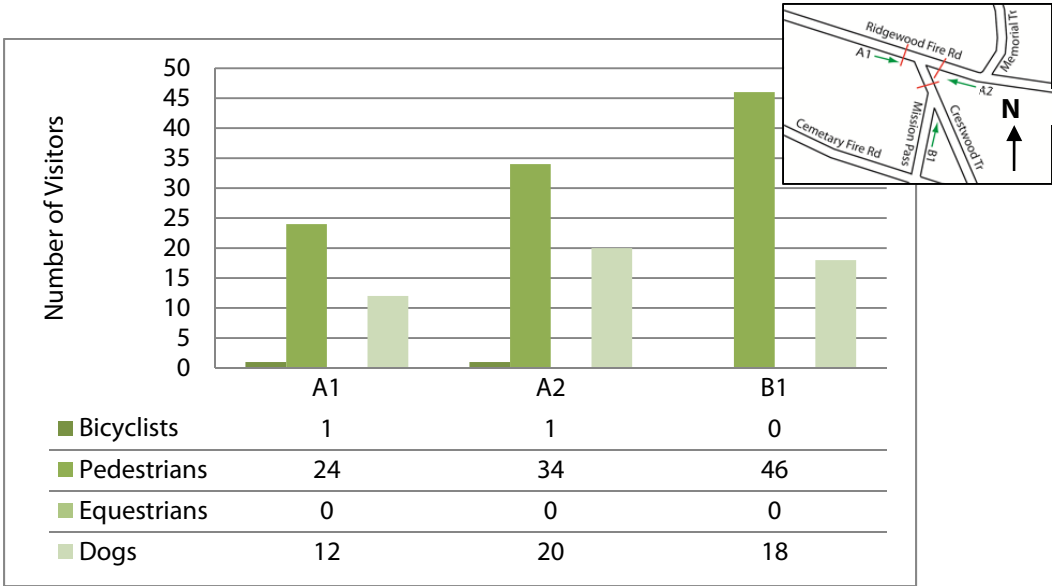


Figure 3-62: Terra Linda/Sleepy Hollow Trail Activity by Direction

3.13.2. Survey Summary

Seventy-one people responded to the survey at Terra Linda/Sleepy Hollow.

Access Mode

More than half of survey respondents (59 percent) drove alone or carpoled to Terra Linda/Sleepy Hollow and another 38 percent walked (Figure 3-61).

Entrance

Locations where survey respondents entered the preserve are presented below, followed by the number of responses.

- Ridgewood (20)
- Mission Pass (13)
- Sorich Park (9)
- Fawn Drive (7)

Exit

Locations where survey respondents exited the preserve are presented below, followed by the number of responses.

- Ridgewood (20)
- Mission Pass (13)
- Sorich Park (10)
- Crestwood (8)

Destination

Popular destinations cited by survey respondents are listed below, followed by the number of responses.

- Ridgewood Loop (18)
- Ridgewood Fire Road (7)
- Fawn Drive (7)
- Laura Hill Loop (4)

Visitor Experience

Most survey respondents rated their experiences as great or good. A few (10 percent) rated the usability of maps and signs as fair or poor (Figure 3-61).

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs : Good to great (66 percent)
- Interactions with other visitors: Good to great (94 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide general comments. The common comments are presented below.

- Dog waste (3)
- Star thistle problem (1)

Key findings:

- Number of surveys: 71
- 59% arrived by driving along or carpool
- 38% arrived by walking
- Key entrance/exit:
 - Ridgewood
 - Mission Pass
- Popular destinations:
 - Ridgewood Loop
 - Ridgewood Fire Road
- Visitor experience:
 - 100% good to great trail conditions
 - 66% good to great maps and signs
 - 94% good to great interactions

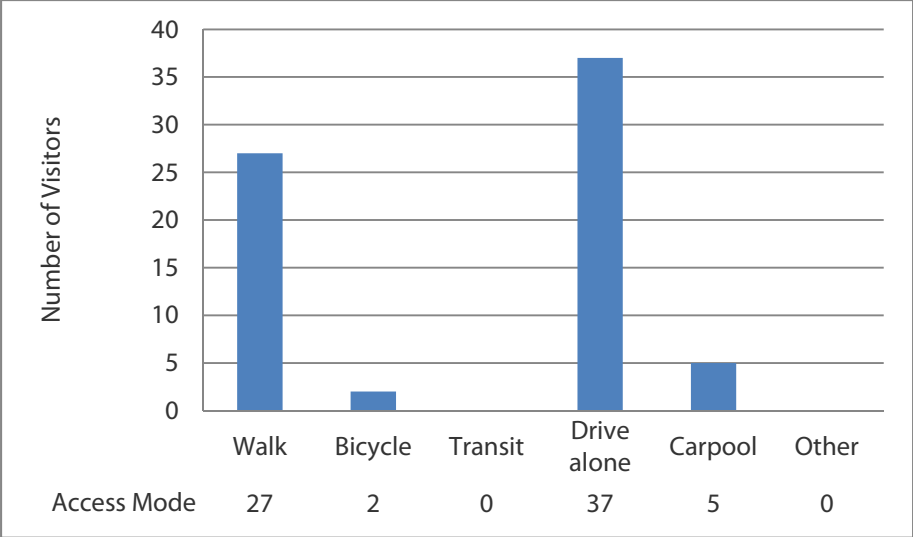


Figure 3-63: Terra Linda/Sleepy Hollow Access Mode

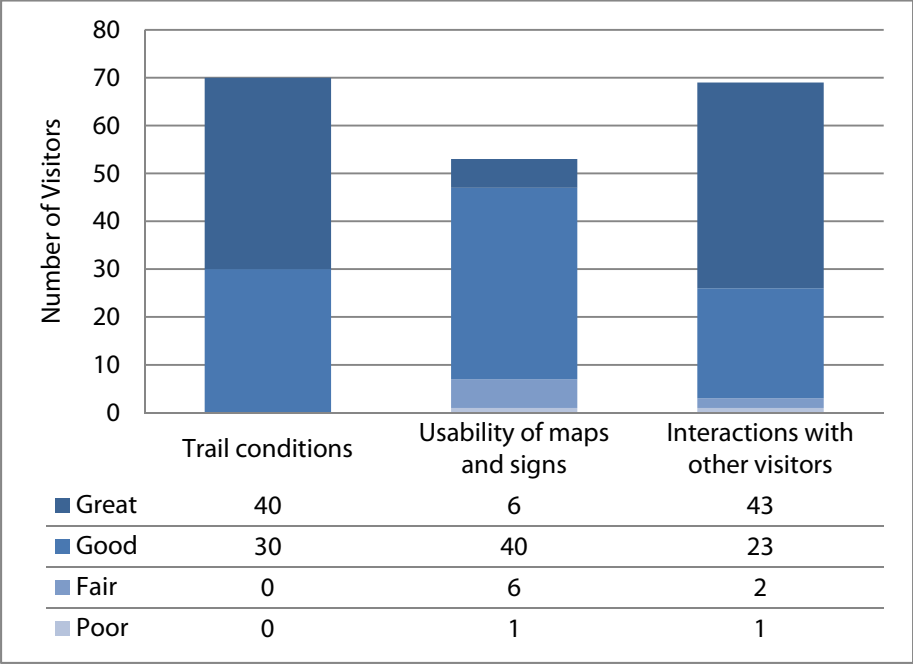


Figure 3-64: Terra Lind/Sleepy Hollow Visitor Experience

3.14. White Hill Preserve

Figure 3-65 presents the count location at White Hill.

3.14.1. Count Summary

Count Periods

7:30am – 9:30am
Thursday, September 22, 2011

4:30pm-6:30pm
Thursday, September 22, 2011

11:00am – 1:00pm
Saturday, October 1, 2011

Count Summary

White Hill had the second lowest visitor activity per count period. Volunteers counted 29 visitors during three count periods (Figure 3-66). Just under half of visitors (48 percent) approached from the east on White Hill Fire Road (Figure 3-67).

Bicyclists

White Hill had the second highest bicyclist per visitor ratio (72 percent) among locations where more than seven bicyclists were counted. Most bicyclists (62 percent) approached from the west on White Hill Fire Road.

Pedestrians

Volunteers counted eight pedestrians. Roughly the same number of pedestrians (3 and 4) approached from the north on Sherwood Forest Fire Road and from the east on White Hill Fire Road.

Equestrians

No equestrians were counted at this location.

Dogs

White Hill had a 50 percent dog per pedestrian ratio. Volunteers counted four dogs. Approximately 50 percent of pedestrians walked with dogs.

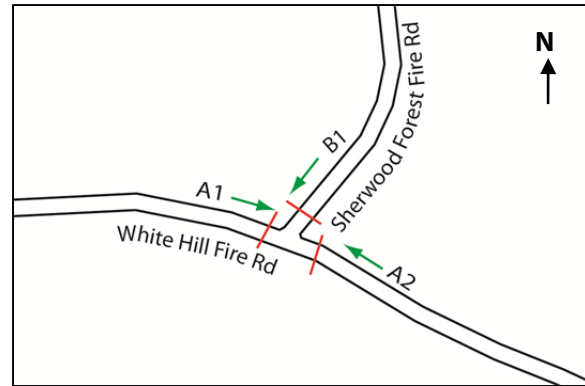


Figure 3-65: White Hill Count Location

Key findings:

- Number of visitors: 29
- Number of dogs: 4
- 72% of visitors were bicyclists
- 28% of visitors were pedestrians
- No equestrians were counted
- 50% of pedestrians walked with dogs
- Approach differed by mode:
 - Bicycles approached from the west on White Hill Fire Road
 - Pedestrians approached from the north on Sherwood Forest Fire Road and from the east on White Hill Fire Road

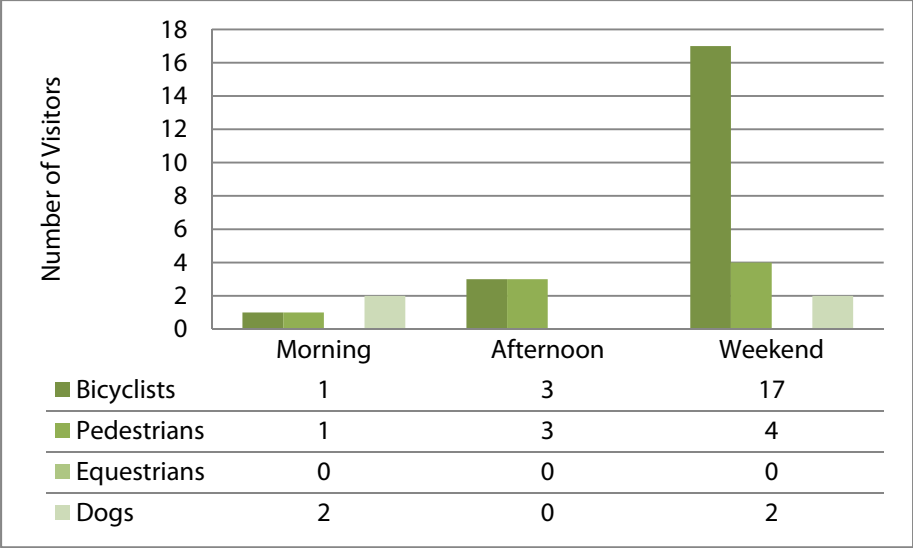


Figure 3-66: White Hill Activity by Time

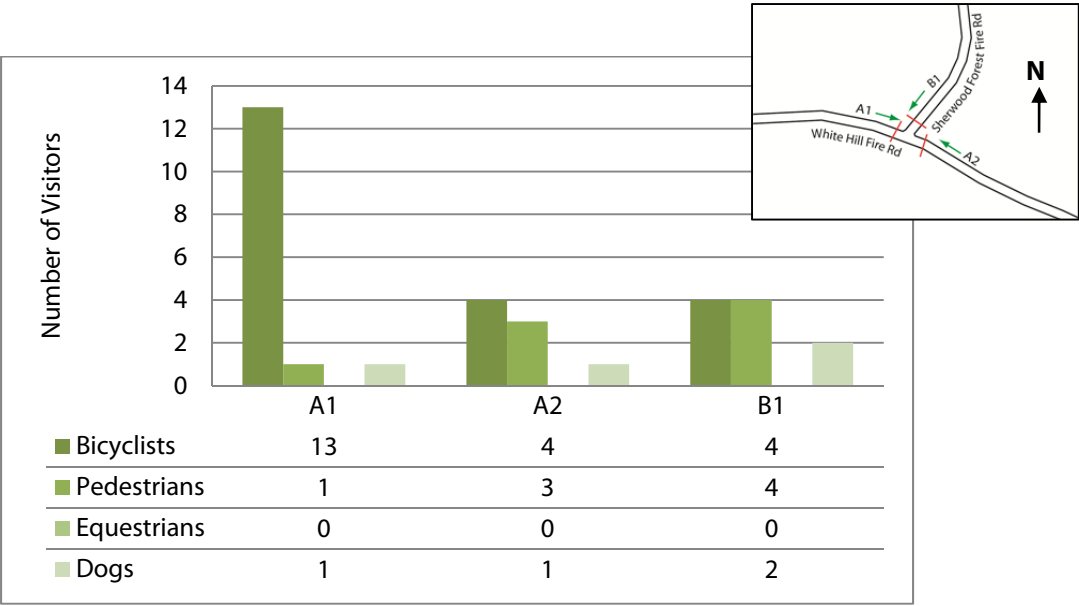


Figure 3-67: White Hill Trail Activity by Direction

3.14.2. Survey Summary

Twelve people responded to the survey at White Hill.

Access Mode

Half of survey respondents bicycled to White Hill, while the remaining respondents either drove alone or carpooled (Figure 3-68).

Entrance

Locations where survey respondents entered White Hill are presented below, followed by the number of responses for each.

- White Hill Bridge (3)
- White Hill (2)
- White Hill School (2)
- Tamarando (2)
- Iron Springs (2)
- Toyon (1)

Exit

Survey respondents exited White Hill at the following (most cited) locations, which are followed by the number of respondents that exited at that location.

- White Hill Bridge (4)
- White Hill Fire Road (2)

Destination

Survey respondents used White Hill trails to get to the following destinations, which are followed by the number of respondents that were going to that destination.

- Fairfax (4)
- Loop (4)
- Tamarando (2)
- San Anselmo (1)

Visitor Experience

Most survey respondents rated their experiences as great or good. Many (25 percent) rated the usability of maps and signs as fair or poor and a few rated their interactions with other visitors the same (Figure 3-69).

- Trail conditions: Good to great (100 percent)
- Usability of maps and signs: Good to great (70 percent)
- Interactions with other visitors: Good to great (78 percent)

Issues and Comments

Survey respondents were asked to note accessibility concerns and to provide comments. The common concerns and comments are provided below.

- More single track (3)
- Multi-use single track isn't a good idea (1)

Key findings:

- Number of surveys: 12
- 50% arrived by bicycle
- 42% arrived by driving alone
- Key entrances/exits:
 - White Hill Bridge
- Popular destinations include:
 - Fairfax
 - Loop
- Visitor experience:
 - 100% good to great trail conditions
 - 70% good to great maps and signs
 - 78% good to great interactions

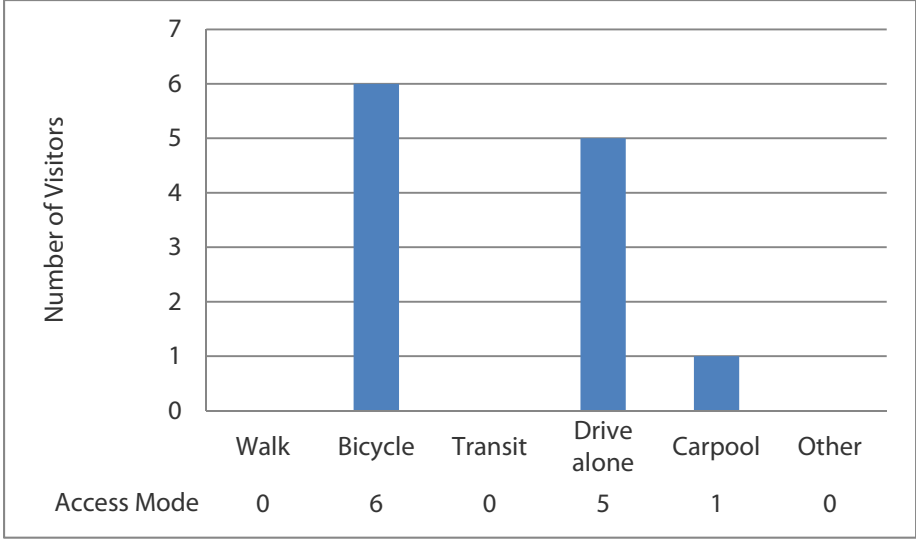


Figure 3-68: White Hill Access Mode

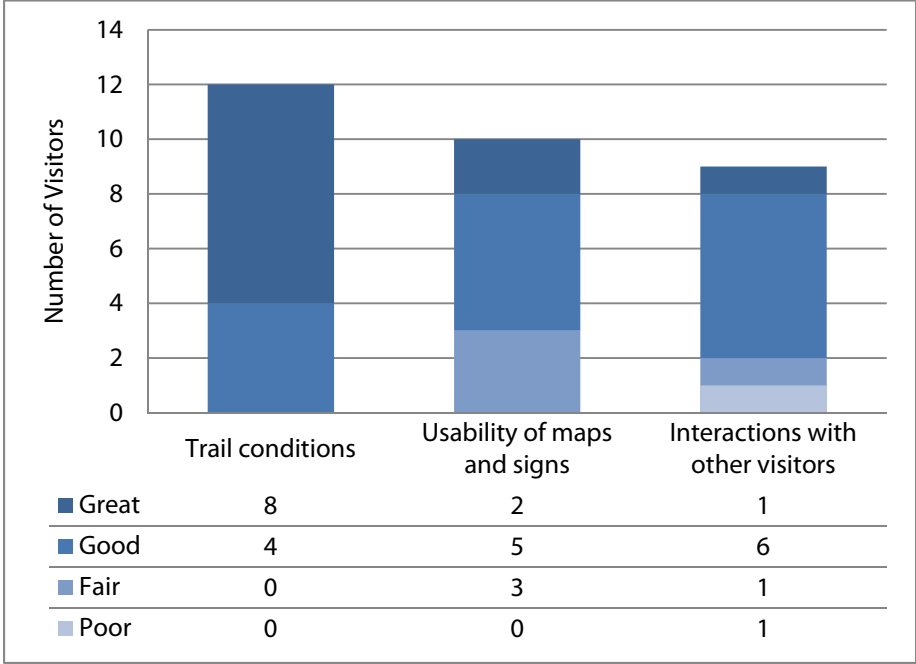


Figure 3-69: White Hill Visitor Experience

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4. Conclusion

The census and survey results provide valuable information that Parks can use to inform the RTMP. Overall, visitors rated their experiences as great or good. However, visitors cited many of the same concerns at multiple preserves. Concerns and preferences were closely associated with visitor types e.g., bicyclists were in favor of more single track trails. The summary below highlights the key findings identified at many of the preserves.

Most Visited Preserves

Volunteers counted visitors during three separate two-hour periods at all but three preserves (Camino Alto, Cascade Canyon and Rush Creek). Volunteers counted these preserves during two periods. Without consideration of missed count periods, the most visited preserves were:

- Baltimore Canyon
- Blithedale
- Indian Valley
- Camino Alto (two count periods)

Consideration of missed count periods can be achieved by calculating the average count period volume. The preserves with the highest average count period volume remain the same as those listed above. However, Camino Alto moves from fourth to second highest count period volume.

Visitor Experience

Overall, visitors rated conditions and their interactions with other visitors as great or good. Nearly a quarter of visitors rated the usability of maps and signs as fair or poor.

Bicycles

China Camp State Park had the highest bicycle mode share (77 percent) and the second highest average volume per count period (29). Blithedale Summit had a moderate bicycle mode share (35 percent), but had the highest average volume per count period (35).

The most common concerns about bicyclists were that discourteous and rode too fast. Visitors cited these issues at the following preserves.

- Baltimore Canyon
- Blithedale Summit
- Mount Burdell
- China Camp State Park

The most common request regarding bicyclists was to increase bicycle accessibility, including more single track trails, at the following preserves.

- Blithedale Summit
- Cascade Canyon
- White Hill

Dogs

Baltimore Canyon had the highest dog per pedestrian ratio (67 percent) and the most dogs per count period (55). Camino Alto has the second highest dog per pedestrian ration (57 percent) and the second most dogs per count period (41).

The most common concerns associated with dogs were that owners do not pick up dog waste and off-leash dogs were nuisances. Visitors cited these issues most often at the following preserves.

- Ring Mountain
- Mount Burdell
- Ridgewood
- Blithedale Summit
- Indian Valley
- Baltimore Canyon

Visitors also praised off-leash areas at the following preserves.

- Ridgewood
- Indian Valley
- Baltimore Canyon

Equestrians

Volunteers counted four equestrians during the census; two each at Mount Burdell and Gary Giacomini, and one at Indian Valley. The very low equestrian volume may suggest that equestrians use the preserves at times that are different from pedestrians and bicyclists.

The most common concern associated with horses was the prevalence of horse waste at the following preserves.

- Mount Burdell
- China Camp State Park
- Camino Alto

One visitor at Indian Valley noted that they appreciated horses on the trails.

Appendix A. Example Forms

BALTIMORE CANYON COUNT FORM

Name: _____ Location: Crown Road at Hoo-koo-e-koo Trail

Date: _____ Start Time: _____ End Time: _____ Weather: _____

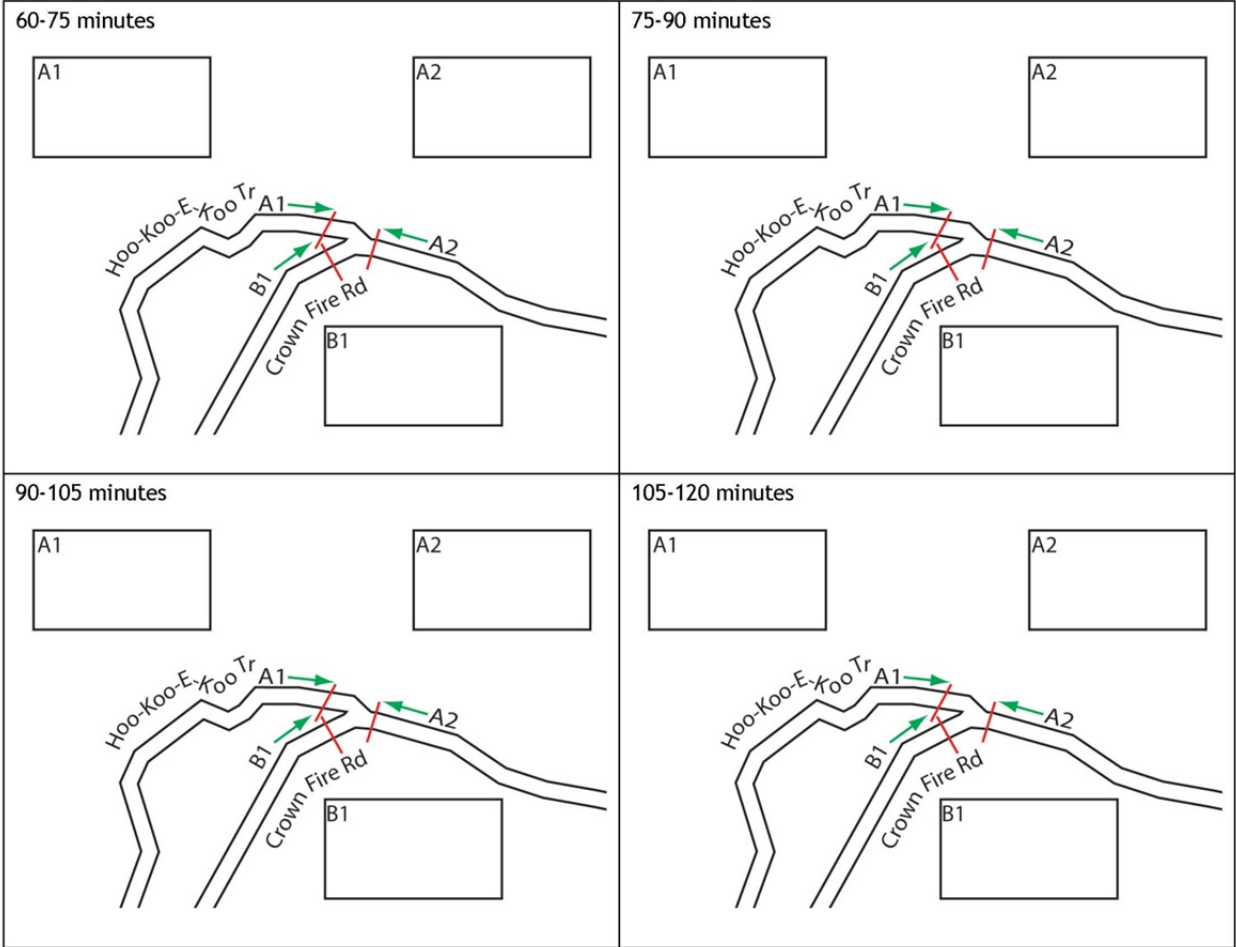
Count Key
B = Bike
P = Pedestrian
E = Equestrian
M = Motorized
D = Dogs

Please fill in your name and weather conditions (fair, rainy, very cold).

Count all trail users crossing your through the intersection under the appropriate categories.

- Count in 15-minute increments.
- Count the number of people on the bicycle or horse, not the number of bicycles or horses.
- Use one intersection graphic per 15-minute interval.

<p>0-15 minutes</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A1</div> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A2</div> </div>	<p>15-30 minutes</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A1</div> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A2</div> </div>
<p>30-45 minutes</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A1</div> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A2</div> </div>	<p>45-60 minutes</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A1</div> <div style="border: 1px solid black; width: 100px; height: 40px; text-align: center;">A2</div> </div>



Marin County Parks Visitor Use Survey

Location: _____ **Date:** _____ **Time:** _____
Surveyor: _____ **Weather:** _____

1. Gender

- Female Male

2. Age group? (check only one)

- Under 18 45-54
 18-24 55-64
 25-34 65 and over
 35-44

3. In what County do you live?

- Marin Sonoma
 San Francisco Alameda
 Other _____

4. How did you get here today?

- Walk
 Bicycle
 Transit
 Drive alone
 Carpool

Other _____

5. How are you traveling on the trail today?

- Walking
 Bicycling
 Horseback
 Motorized apparatus

Other _____

6. What best describes the purpose of this trip? (check all that apply)

- Exercise
 Recreation
 Social
 Experience nature

Other _____

7. How frequently do you use this trail?

- Daily
 Weekly
 Monthly

Other _____

8. When do you typically use this trail? (Check all that apply)

- Morning
 Afternoon
 Evening
 Weekday
 Weekend

9. How frequently do you use Marin County Parks trails?

- Daily
 Weekly
 Monthly

Other _____

10. Did you bring a dog(s) today?

- No
 Yes, 1
 Yes, 2
 Yes, 3
 Yes, more than 3

11. What is your destination? (reference map)

11a. Where did you enter the preserve?

11b. Where do you intend to exit?

12. How long to you intend to be on the trail today? (not including travel time to the preserve)

- Less than one hour
 1-2 hours
 2-4 hours
 More than 4 hours

13. Please tell us about your trail experience.

	Great	Good	Fair	Poor
1. Trail conditions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Usability of maps and signs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Interactions with other visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. For any "Poor" answers above, please cite specific issues (use back if necessary, note question number):

14. Do you have accessibility concerns, if so please explain:

15. General Comments

How often did you select a survey respondent? E.g. every person, every other person, etc

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Appendix B. Extrapolation Methodology

NATIONAL BICYCLE & PEDESTRIAN DOCUMENTATION PROJECT Count Adjustment Factors

While more year-long automatic count data is needed from different parts of the county, especially for pedestrians and on-street bicyclists, enough data now exists to allow us to adjust counts done almost any period on multi-use paths and pedestrian districts to an annual figure.

All percentages in the following tables represent the percentage of the total period (day, week, or month).

How to Use This Data

The factors in the following tables are designed to extrapolate daily, monthly, and annual users based on counts done during any period of a day, month, or year. The factors currently are designed to be used by (a) multi-use pathways (PATH) and (b) higher density pedestrian and entertainment areas (PED).

How Many Counts Can it Be Based On?

Given the variability of bicycle and pedestrian activity, we strongly encourage that all estimates be based on the average of at least two (2) and preferably three (3) counts during the same time period and week, especially for lower volume areas. For example, counts could be done from 2-4pm on consecutive weekdays (Tuesday – Thursday) during the same week, or, in consecutive weeks. Weekday counts should always be done Tuesday through Thursday, and never on a holiday. Weekend counts can be done on either day.

Bicyclists versus Pedestrians

The factors used in these formulas are for combined bicyclist and pedestrian volumes. Once you have calculated your total daily, monthly, or annual volume, you can simply multiple the total by the percent breakdown between bikes and pedestrians based on your original count information.

Start with the Hour Count

Once you have collected your count information and developed an average weekday and weekend count volume for bicyclists and/or pedestrians, pick any one (1) hour period from either of those days.

Adjustment Factor

Your next step is to multiply those counts by 1.05.

Sample #1

Average 1 hour weekday count: 236 bikes/peds x 1.05 = 248

Average 1 hour weekend day count: 540 bikes/peds x 1.05 = 567

This adjustment factor is done to reflect the bicyclists/pedestrians who use the facility between 11pm and 6am, or, about 5% of the average daily total. The count formulas are all based on total counts between 6am and 10pm, since many available counts only cover those periods. If you are certain your facility gets virtually no use between those hours, you can forgo this step.

Calculate Daily Weekday and Weekend Daily Total

Identify the weekday and weekend hour your counts are from in Table 1 below. Be sure to use the PATH column for all multi-use paths, and the PED column for all higher density pedestrian areas with some entertainment uses such as restaurants. Be sure to select the correct time of year (April-September, or, October-March) as well.

Sample #2: done in June on a multiuse path (weekday = 4-5pm, weekend day = 12-1pm):

Adjusted weekday hourly count = $248 / .07 = 3,542$ daily users

Adjusted weekend day hourly count = $567 / .1 = 5,670$ daily users

Calculating Average Weekly Volumes

We need to adjust these figures based on the day of the week. See table 2 below. Find the day of the week your counts were done, and factor them by that percent. If you did multiple counts on different days of the week, then take the average of those factors.

Sample #3: counts were done on a Tuesday and a Saturday.

Adjusted weekday count = $3,542 / .13 = 27,246$ average weekly users

Adjusted weekend count = $5,670 / .18 = 31,500$

Add these two figures together, and divide by 2: $27,246 + 31,500 = 58,746 / 2 = 29,373$ people

The average weekly volumes for that month are 29,373 people.

Convert to Monthly Volumes

To convert from average weekly volumes to an average monthly volume, multiply the average weekly volume by the average number of weeks in a month (4.33 weeks).

Sample #4: $29,373 \times 4.33 = 127,282$ people.

This is the average monthly volume for the month the counts were conducted.

Convert to Annual Totals

To convert from the average monthly volume for the month the counts were taken into an annual total, divide the average monthly figure by the factor from Table 3 for the month the counts were conducted. Use the general climate zones described. Some climate zone types are not included.

Sample #5: counts were done in June in a moderate climate zone.

Average monthly volumes = $127,282 / .08 = 1,591,037$ people.

Based on these sample figures, it is estimated that almost 1.6 million people use the pathway annually.

Average Monthly and Daily Figures

To identify the average monthly and daily figures, simply divide the annual figure by 12 (for month) or by 365 (for daily figures).

Monthly average = $1,591,037 / 12 = 132,586$ people

Daily Average = $1,591,037 / 365 = 4,359$ people

Hourly Adjustment Factors

Hourly activity by season and facility type

The actual count periods conducted as part of this effort were used in this step.

	April - September					October - March			
	6am - 9pm					6am - 9pm			
	---- PATH-----		-----PED-----			---- PATH-----		-----PED-----	
	wkdy	wkend	wkdy	wkend		wkdy	wkend	wkdy	wkend
0600	2%	1%	1%	1%	0600	2%	0%	1%	0%
0700	4%	3%	2%	1%	0700	4%	2%	2%	1%
0800	7%	6%	4%	3%	0800	6%	6%	3%	2%
0900	9%	9%	5%	3%	0900	7%	10%	5%	4%
1000	9%	9%	6%	5%	1000	9%	10%	6%	5%
1100	9%	11%	7%	6%	1100	9%	11%	8%	8%
1200	8%	10%	9%	7%	1200	9%	11%	9%	10%
1300	7%	9%	9%	7%	1300	9%	10%	10%	13%
1400	7%	8%	8%	9%	1400	9%	10%	9%	11%
1500	7%	8%	8%	9%	1500	8%	10%	8%	8%
1600	7%	7%	7%	9%	1600	8%	8%	7%	7%
1700	7%	6%	7%	8%	1700	7%	5%	6%	6%
1800	7%	5%	7%	8%	1800	6%	3%	7%	6%
1900	5%	4%	7%	8%	1900	4%	2%	7%	6%
2000	4%	3%	7%	8%	2000	2%	1%	6%	6%
2100	2%	2%	6%	8%	2100	2%	1%	5%	5%

Daily Adjustment Factors

The actual count days conducted as part of this effort were used in this step.

Day of Week	Share of Activity
MON	14%
TUES	13%
WED	12%
THURS	12%
FRI	14%
SAT	18%
SUN	18%

Monthly Adjustment Factors by Climate Area

The actual count month and moderate climate were used as part of this step.

	Climate Region		
	Long Winter	Moderate	Very Hot Summer
JAN	3%	7%	10%
FEB	3%	7%	12%
MAR	7%	8%	10%
APR	11%	8%	9%
MAY	11%	8%	8%
JUN	12%	8%	8%
JUL	13%	12%	7%
AUG	14%	16%	7%
SEP	11%	8%	6%
OCT	6%	6%	7%
NOV	6%	6%	8%
DEC	3%	6%	8%

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