

Portuguese Bend Nature Preserve Visitor Survey Results

June 23, 2007



Introduction

On June 30, 2007 the Palos Verdes Peninsula Land Conservancy (PVPLC) conducted a visitor survey within the Portuguese Bend Nature Preserve (PBNP). The focus of the survey was trail use and was intended to provide PVPLC with a better understanding of who is using the PBNP and in what ways. It was modified from a trail survey designed and presented at the 2007 California Trails and Greenways Conference by Professor Patrick Tierney of CSU San Francisco. Though much effort was put into creating a systematic and reliable survey, results of the survey are not intended to be a scientific analysis, but rather of a collection of visitor opinions that will enhance PVPLC's ability to manage the Preserve.

Methods

In order to obtain as large a sample size as possible, June 30th was chosen as the scheduled date because it fell on a Saturday when more people usually do not have to work, it was in the early summer while the weather was still relatively cool, and school was not in session so more younger people or families were available to take the survey. Volunteer surveyors were trained during a two hour meeting in the PVPLC office. On the day of the event volunteers set up stations at three locations around the Preserve from 7am-4pm, and at a fourth location from 7am-11am and again from 3pm-4pm. The survey locations were as follows:

- the entrance to Forrestal, at the gate
- between the parking lot and the trail head at Abalone Cove
- on the trail near the terminus of Narcissa Drive
- in front of the water tower off dirt Crenshaw in Canyons.

The survey was 17 questions long on two pages of paper stapled together and designed to be taken in 10 minutes. Clip boards and pens were handed out to all respondents. Granola bars were handed out as an incentive to fill out the survey. A tally was taken of everyone that passed the survey taker, whether they responded or declined to take the survey along with the time, gender of visitor, and the type of use (pedestrian, horseback, bike, or dog

walker). Reasons given for not taking the survey were also recorded when provided. The most popular reasons for not taking the survey were that people were busy, not interested, had already filled it out, or would do it on the way back or later.

At around 12:30 pm, the volunteers became overwhelmed by the amount of traffic at the water tower survey location and were not able to tally everyone who declined to respond. However, they came very close to capturing everyone. In addition, some people who declined saying that they would take the survey later may have done so, and would have been counted twice. Because of these situations, the tally of decliners is an estimate.

All respondents were instructed to fill out both pages of the survey and immediately return it to the surveyor. Surveys were intended and encouraged to be taken individually, but surveyors witnessed several occasions where two or more people worked together to respond. Some respondents choose to not answer all questions. Many times, large groups would pass and only a couple of people from the group would choose to take the survey.

The data was entered into a Microsoft Access computer program. The responses are seen in Table 3 below. Graphs are shown for some of the responses.

Results

Approximately 47% of the people that passed through the Preserve that day responded to the survey (Table 1). 43% were female and 57% were male. This same trend was reflected in the total tally of visitors to the Preserve that day with 44% female visitors and 56% male visitors.

The tally was an important tool in getting a clear idea of the way the trail system is actually being used, since the survey results alone do not accurately reflect the percentages of each user group at the Preserve that day. For example, according to the survey only 18% of the respondents answered that they participated in jogging/running or walking/hiking on the day of the survey. Yet pedestrians were by far the most represented of the four user groups recorded that day at 79% (Table 2). That is a discrepancy of 61%. It should be noted that at

Abalone Cove 99% of the visitors were pedestrian which represents 47% of the total pedestrian count and also 28% of those that declined to take the survey. It is unclear why there were such a large number of people that declined to take the survey at this location.

The tally also showed that the next largest user group was the bicyclists with 11%, but 20% of the survey respondents claimed to have participated in some type of bicycling on the Preserve that day. Tally results of dog walkers and equestrians more closely matched the survey results where 9% of the tallied visitors and 12% of the survey respondents were dog walkers, and less than one percent of the visitors recorded that day were on horse back, while 3% of the respondents reported horse back riding that day. However, the station set up at the end of Narcissa was established due to its proximity to the equestrian zone in Portuguese Bend, and the water tower station was located so as to capture equestrians entering from the Rolling Hills Estates area.

Other notable trends are shown below. Conclusions are provided at the end of the report.

- 67% reported having either a 4 year or graduate degree
- The majority of respondents (65% of those that answered the question) reported that they were extremely or very likely to stay on designated trails if safe, defined trails were provided, yet most felt that other people were only somewhat likely to stay on trails. There appears to be the perception that other people are not as likely to follow the rules.
- 56% had visited the Preserve at least twice in the last 30 days.
- 95% had not experienced any conflict with any other user group that day and 87% had never experience any conflict. All comments provided to describe the past conflicts are below. Answers were transcribed exactly as they were written, including spelling.

Forrestal

- Bicyclists
- Have with bird watchers being very nasty because my dogs were off leash. Threatened to call the police
- Horses
- people littering

- soccer playing/yelling at Ladera Linda Fields & the speeding cars going up to fields & their trash remaining
- Users not cleaning up after their dogs
- PVPLC Guy shooed me away from Forrest Natural Ampetheater

Abalone Cove

- Just kids have bonfires; wreck the co-op nursery
- not cleaning up after trash; bonfires; and destroying property
- off leash dogs

Narcissa

- Motorcycle on trail

Water Tower

- a few bike riders
- Bicycles/No respect for others
- Biker – Group
- Bikers (most are courteous some are not)
- Bikers not concerned about hikers, my friend got hit
- Bikes riding into me several times, even when I hollered at them to make them aware I was...
- Bikes too fast
- hikers assuming they have more rights to trails
- horses frightened by bike riders
- Mountain bikers - very dangerous, almost run over by them
- motorbike riders
- people in bikes
- Rude hiker I even stopped
- Same-bikes going really fast on narrow trails and not slowing
- Sierra Club
- very disappointed with cyclists destroying & eroding trails

Table 1 Number of Visitors that responded or declined to take the survey by area

Visitors	Forrestal		Abalone Cove		Narcissa		Water Tower	
R= Responded D= Declined								
	R	D	R	D	R	D	R	D
Males	12	16	30	80	6	9	90	48
Females	8	12	20	64	5	15	72	33
Total	20	28	50	144	11	21	162	81
Total Visitors		48		194		34		243

Total Visitors to Preserve: 519

Total Responded: 243

Total Declined: 274

Total Males: 291

Total Females: 229

Table 2 Count of each user group by area

	Forrestal	Abalone Cove	Narcissa	Water Tower	Total
Pedestrians	28	192	21	168	409
Equestrians	0	0	3	1	4
Bicyclists	5	0	6	48	59
Dog walkers	15	2	4	26	47

Conclusions

I. Preserve use varies by area.

One of the most obvious conclusions to draw from the survey is that different areas of the PBNP are used in different ways. Forrestal seems to be used very lightly and primarily by residents of the area who frequent it often. Though there is some bike use, dog walking and pedestrian use are the most common uses there. Abalone Cove on the other hand, is used quite heavily and solely by pedestrians, with the majority of respondents visiting infrequently and coming from outside the immediate area.

The Narcissa station and the water tower station were both set up inside what is referred to as the Canyons property within the Preserve, yet the results vary at each location. The water tower location is the most heavily trafficked area of the four survey points, providing more than half of the visitors to the PBNP that day whereas the Narcissa station had the least traffic of the survey. Part of the low numbers recorded at the Narcissa entrance could be due to the absence of a surveyor there for 4 hours; however it is more likely that is because it can only be accessed as a trail head from a private, gated community. What is of particular interest is that both areas have similar ratios of each type of use with pedestrians being the majority, followed by bicyclists, then dog walkers, and finally equestrians. More than half of the respondents from both areas had visited the Preserve at least twice in the last 30 days. More than half of the respondents lived outside the immediate area.

2. Overall conflict between user groups is minimal but conflict with bicyclists is evident at the Water Tower

Of particular interest was how the different user groups share the trails, and the level of perceived conflict that exists between user groups. Overall, there was very little conflict reported between user groups. 95% of the respondents answered that they had experienced no conflicts that day, and 87% had not experienced any past conflicts.

Considering the large number of visitors using the Preserve, these numbers express an overall tolerance and peaceful coexistence between the different types of users.

There does seem to be a tendency for the reported conflicts to express concerns regarding bicyclists at the water tower location. Bicycle-involved conflict was not expressed at any of the other locations. It is very likely that there is a bottle neck of traffic being created at the water tower location that leads to a greater likelihood of two user groups competing for the same area, but this trend dissipates and visitors spread out over the Preserve. This issue may be alleviated with the additional parking and trailhead location off of Palos Verdes Drive South that is anticipated in the upcoming years.

3. Clearly-marked, designated trails are important if people are expected to stay on trails.

Currently, all portions of the Preserve except Forrestal have no designated trails or signage to indicate authorized use. These designations are currently being reviewed by the Public Use Master Plan (PUMP) committee. Several questions were posed to address how visitors might respond to clearly marked, well defined trails. We were interested in knowing if people had a general idea of their destinations and which strategies for keeping people on the newly designated would be best received.

The survey responses demonstrate that most people do not have a preconceived notion of which trails they are on. 67% reported they were unsure of the trails they had used that day. This was not the case in Forrestal, where 85% of the respondents had a good idea of the trails they had used. As mentioned, Forrestal has a designated trail system with trail markers that clearly show the trail name and permitted use.

4. Ongoing management is needed to protect habitat.

Most respondents reported they were extremely or very likely to stay on safe, clearly marked trails. Six options for the best way to keep visitors on the trails were provided in

the survey. Providing designated loop trails to points of interest and posting signage to remind visitors of the natural resources they are protecting by staying on trails were the two most popular methods. Revegetation of unauthorized trails was the third most popular strategy selected. These answers correspond well with those provided to the question of what would make people stray from trails. Though only 34% of the total survey takers responded to this question, it is still clear that two of the most popular responses were that people would stray because they were unaware that there are designated trails and that they are unaware that straying from trails causes negative impacts to habitat. These responses indicate that in its current condition, visitors are confused about where they can and can not go within the Preserve.

With proper signage and well defined trails, people are highly likely to stay on designated trails. It also indicates that there is a lack of knowledge that the PBNP is intended to protect habitat. Visitors are requesting reminders that they are protecting habitat by staying on trails. There will most likely need to be some education or signage throughout the Preserve regarding the preservation of habitat. There will probably also have to be some combination of measures such as revegetation, posted signage, and possibly barricades taken to close off trails that are not designated for use.

It is notable to mention that there was a subset of respondents (8 %) that reported that they would stray from trails because they did not want to be restricted in where they go, and a much smaller subset (3%) that expressed they do not care if wandering off trail has negative impacts. It can be assumed from these responses that some people will not adhere to designated trails. Ongoing management will be required to insure that habitat is protected.

Table 3- Responses from survey		Forrestal	Abalone Cove	Narcissa	Water Tower in Canyons	Total Count
Question ** Graph provided	Options	Count	Count	Count	Count	
1. Do you reside or work within 1-2miles of survey location?						
	Yes	10	9	4	43	66
	No	8	41	7	119	175
**2a.What city do you live in?						
	Carson	1	0	0	1	2
	Gardena	0	0	0	1	1
	Harbor City	0	1	0	1	2
	Hermosa Beach	0	0	0	4	4
	Lawndale	0	0	0	4	4
	Lomita	0	1	0	4	5
	Long Beach	1	3	0	11	15
	Manhattan Beach	0	1	3	4	8
	Palos Verdes Estates	2	3	0	8	13
	Rancho Palos Verdes	8	6	4	30	48
	Redondo Beach	1	4	1	28	34
	Rolling Hills	0	1	0	2	3
	Rolling Hills Estates	0	2	0	5	7
	San Pedro	4	4	0	6	14
	Torrance	1	3	1	18	23
	Willmington	0	0	0	4	4
	Within Los Angeles/Orange Counties	0	13	3	20	36
	Within California	0	1	0	1	2
	Outside California	0	7	0	6	13
	Outside Continental U.S.	0	0	0	1	1
3. How many visits have you made in last 30 days?						
	>= 6	12	5	5	44	66
	4 - 5	2	3	0	22	27
	2 - 3	0	6	1	35	42
	1	1	23	1	36	61
	None	3	13	4	11	31
4a. Are you part of an organized group? If yes, describe the group.						
	Yes	1	1	2	14	18
	No	17	49	9	146	221
4b. If yes, describe the group.						
	Coastwalk	1	0	0	0	1
	CORBA	0	0	0	3	3
	Four Season West Ski Club	0	0	0	3	3
	Love and Faith Christian Center	0	0	0	2	2
	Mountain Bikers for Freedom	0	0	0	1	1
	Portuguese Bend Riding Club	0	0	2	0	2

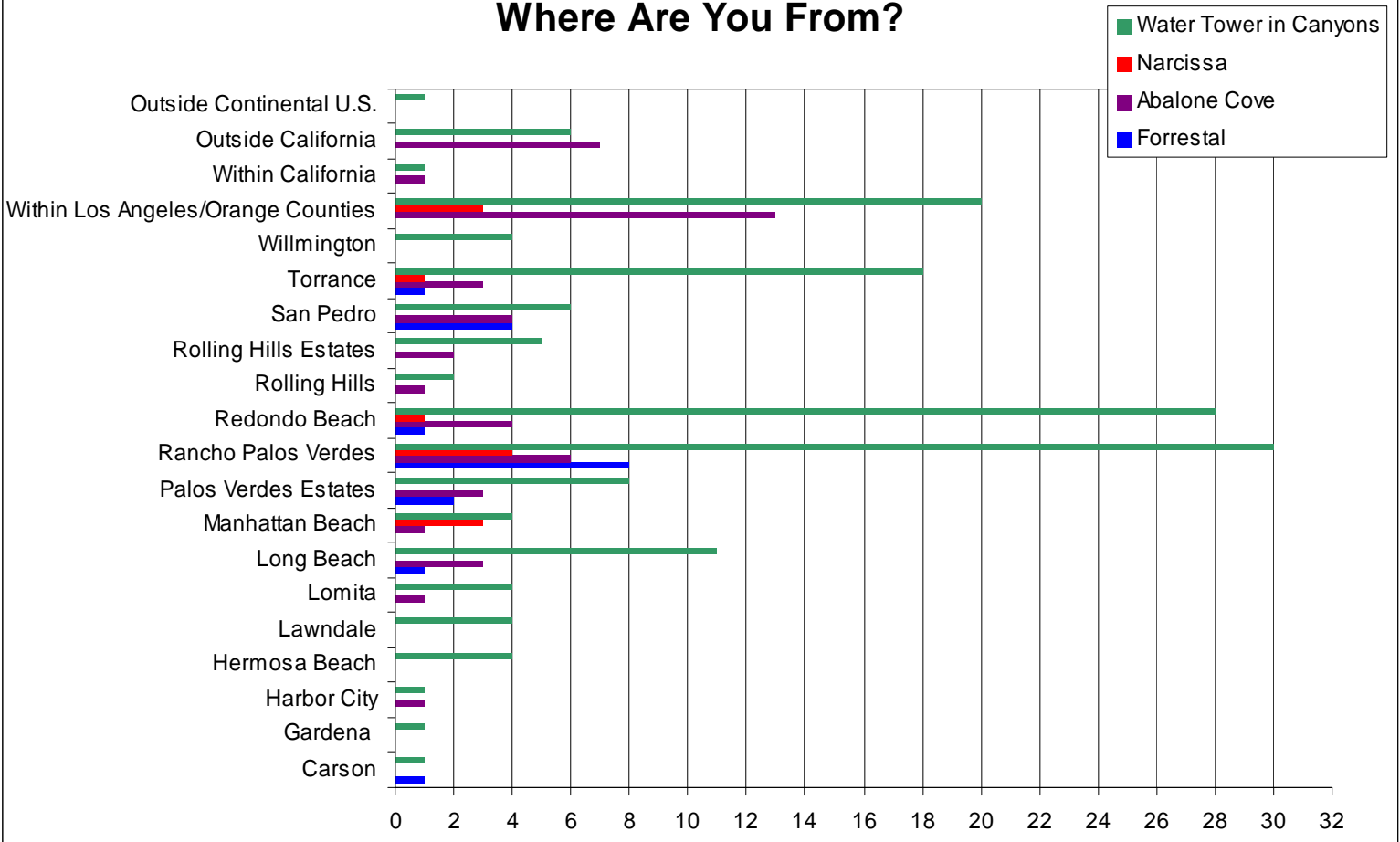
	RCY Mountain Bike	0	0	0	1	1
	Sierra Club	0	0	0	2	2
	South Bay Freeride	0	0	0	1	1
	South Bay Mountain Biking Club	0	0	0	1	1
**5. Which activities have you participated in today?						
	Beach activities	1	6	0	5	12
	Being with family/friends	4	7	3	17	31
	Being part of a class or group activity	3	0	0	7	10
	Bicycling-natural terrain jumps/building jumps	0	3	2	10	15
	Bicycling-single track/downhill	1	2	3	15	21
	Bicycling-casual	0	3	2	7	12
	Dog walking	6	2	1	8	17
	Dog off leash opportunity	5	2	0	6	13
	Fishing	1	2	0	2	5
	Horse back riding	1	0	1	5	7
	Jogging/running	3	2	0	8	13
	Learning history of the area	1	6	0	6	13
	Observing scenery/plants/animals/nature	3	8	2	11	24
	Picnicking	0	3	0	3	6
	Walking/hiking	5	11	1	14	31
	Other (describe)	0	6	0	4	10
6. What is the name of the trail you used today? (List up to 3 trails)	*Some answers were not legible and therefore not included in the results	Forrestal	Abalone Cove	Narcissa	Water Tower in Canyons	Total Count
	All can Ride	0	0	0	1	1
	Abalone cove trail	0	4	0	0	4
	Badlands	0	0	0	4	4
	Beach trail	0	1	0	0	1
	Burmese	0	0	0	2	2
	Crenshaw	0	0	0	5	5
	Dead Man's Pass	0	0	0	1	1
	Del Cerro	0	0	0	4	4
	Don't know	8	41	9	104	162
	Fire Road	0	0	0	2	2
	Fire Station	0	0	0	2	2
	Forrestal Drive	1	0	0	0	1
	Forrestal	4	0	0	0	4
	Grand Canyon	0	0	0	3	3
	Kent Cates	0	0	0	1	1
	Ishibashi	0	0	0	2	2
	Cristo	1	0	0	0	1
	Main	0	0	0	1	1
	Narcissa trail	0	0	2	0	2
	Nike/Miraleste	1	0	0	0	1
	Peacock Flats	0	0	0	4	4
	Portuguese Bend Trail	0	0	0	6	6
	Rattlesnake	0	0	0	5	5

	Rock jump	0	0	0	1	1
	Slalom	0	0	0	3	3
	Quarry Trail	2	0	0	0	2
	Water Tower Trail/jumps	0	0	0	2	2
	Not listed	1	4	0	1	6
7. What was your primary destination along the trail today? Describe.	*Some answers have been condensed to fit into one of the categories below					
	Bottom of hill and back	0	0	0	5	5
	Beach/Tidepools	0	20	0	2	22
	Bike riding trails	0	0	0	6	6
	dog walking	1	0	0	0	1
	Exercise	0	0	0	4	4
	Fire station or water tower or Del Cerro Park	1	0	0	3	4
	Following trail	0	0	0	2	2
	hike around preserve	2	0	0	6	8
	Jog around the school	1	0	0	0	1
	Loop hike	2	0	0	4	6
	Overlook/Pines on hill	0	0	0	2	1
	Passing through	0	0	1	0	1
	Photography	0	2	0	0	2
	To my house	1	0	0	1	2
	Rock jump	0	0	0	2	2
	Swing	0	0	0	2	2
	TOP	1	0	0	0	1
	Unsure	3	27	10	78	118
**8. If safe, defined trails were provided to many of the scenic points and attractions in the Portuguese Bend Nature Preserve in order to preserve the natural resources there, A. How likely would you be to stay on designated trails, even if it somewhat restricted where you could go?		Forrestal	Abalone Cove	Narcissa	Water Tower in Canyons	Total Count
	Extremely	7	15	4	40	46
	Very	6	13	3	62	84
	Somewhat	2	16	2	34	54
	Not at All	1	4	2	9	16
**9. If safe, defined trails were provided to many of the scenic points and attractions in the Portuguese Bend Nature Preserve in order to preserve the natural resources there, B. How likely do you think it is that other people will stay on designated trails, even if it somewhat restricted where they could go?						
	Extremely	2	3	2	7	14

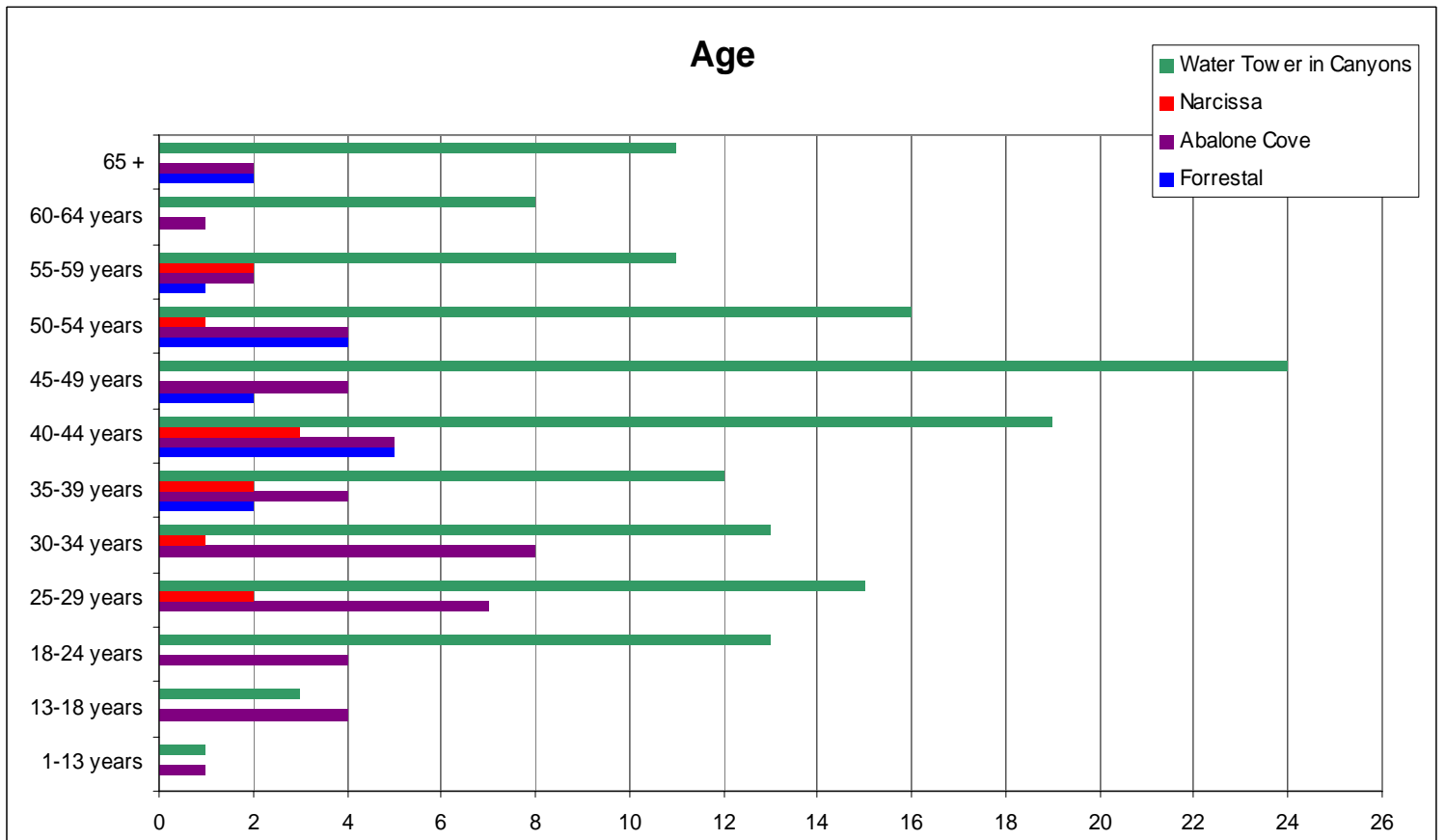
	Very	3	19	1	51	74
	Somewhat	9	23	5	80	117
	Not at All	1	3	2	4	10
** 10. What would MOST increase the likelihood that you would STAY on the designated trails?						
	designated loop trail to scenic point/attraction	1	15	5	69	90
	designated "fun zone" with terrain features to jump/ride mountain bikes	2	13	7	39	61
	barrier across unauthorized trails	7	16	7	29	59
	posted signage to remind me of the natural resources I am preserving	8	25	7	50	90
	posted safety reminder of dangers	2	13	4	39	58
	revegetation of unauthorized trails	8	18	5	47	78
** 11. What would most influence your decision to stray from designated trails?						
	Not being aware there were designated trails	3	4	4	8	19
	Not knowing that creating new trails or straying from designated trails has negative impact on habitat	3	7	2	8	20
	Not knowing that creating new trails or straying from designated trails can cause erosion problems	2	6	1	8	17
	Not wanting to be restricted as to where I want to go	2	7	3	8	20
	Not concerned if creating new trails or straying from designated trails has negative impacts	0	2	2	3	7
** 12. Did you experience any conflict with any other user group today?						
	Yes	0	2	2	5	9
	No	18	48	9	157	232
** 13. Have you experienced any conflict with any other user group in the past?						
	Yes	6	3	3	17	29
	No	12	47	8	145	212
14. What racial group(s) do you most identify with? Check all that apply.						
	American Indian or Alaska	0	1	0	1	2

	Native					
	Black or African American	0	0	0	9	9
	White	14	33	9	82	138
	Native Hawaiian or Other Pacific Islander	0	0	0	0	0
	Asian	1	4	0	24	28
	Hispanic or Latino	0	5	0	5	10
	Other	1	0	1	14	16
15. Check the highest level of formal <u>schooling</u> that you have completed?						
	Grades 1-11	0	3	0	4	7
	High School graduate	0	2	0	2	4
	Some college, no diploma	1	10	2	22	35
	Business/vocational school	1	3	1	10	15
	Four year college graduate	5	17	3	49	74
	Post Graduate Work/prof. school	9	12	5	62	88
**16. Please indicate your age by checking one of the following categories.						
	1-13 years	0	1	0	1	2
	13-18 years	0	4	0	3	7
	18-24 years	0	4	0	13	17
	25-29	0	7	2	15	23
	30-34	0	8	1	13	22
	35-39	2	4	2	12	20
	40-44	5	5	3	19	32
	45-49	2	4	0	24	30
	50-54	4	4	1	16	25
	55-59	1	2	2	11	16
	60-64	0	1	0	8	9
	65 or greater	2	2	0	11	15
17. Are there any children under the age of 18 living in your household?						
	Yes	8	19	2	46	75
	No	10	31	9	116	166

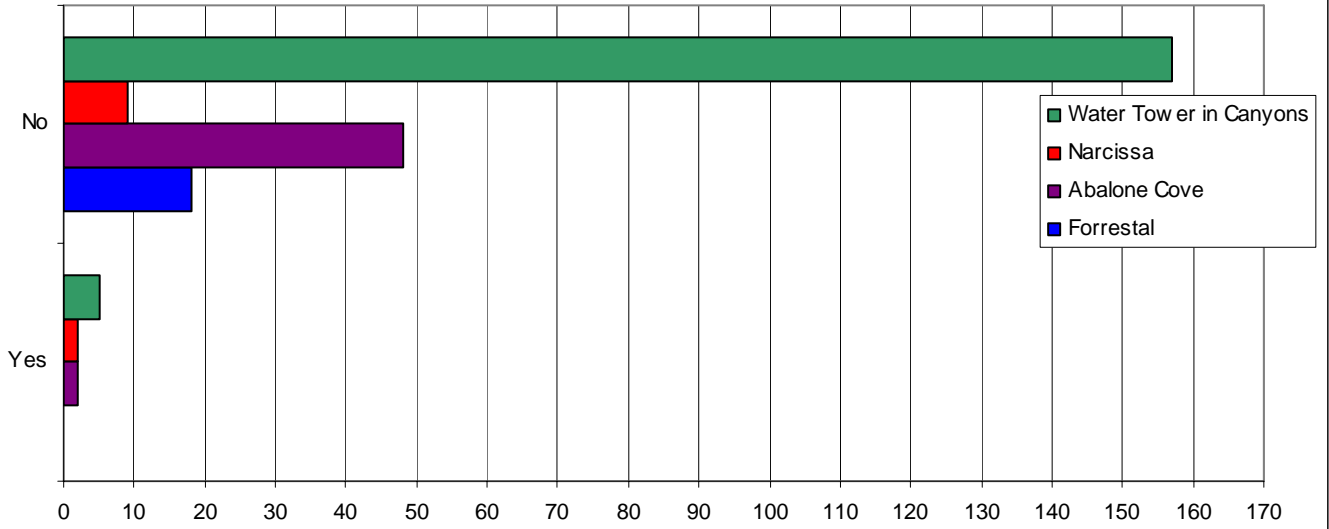
Where Are You From?



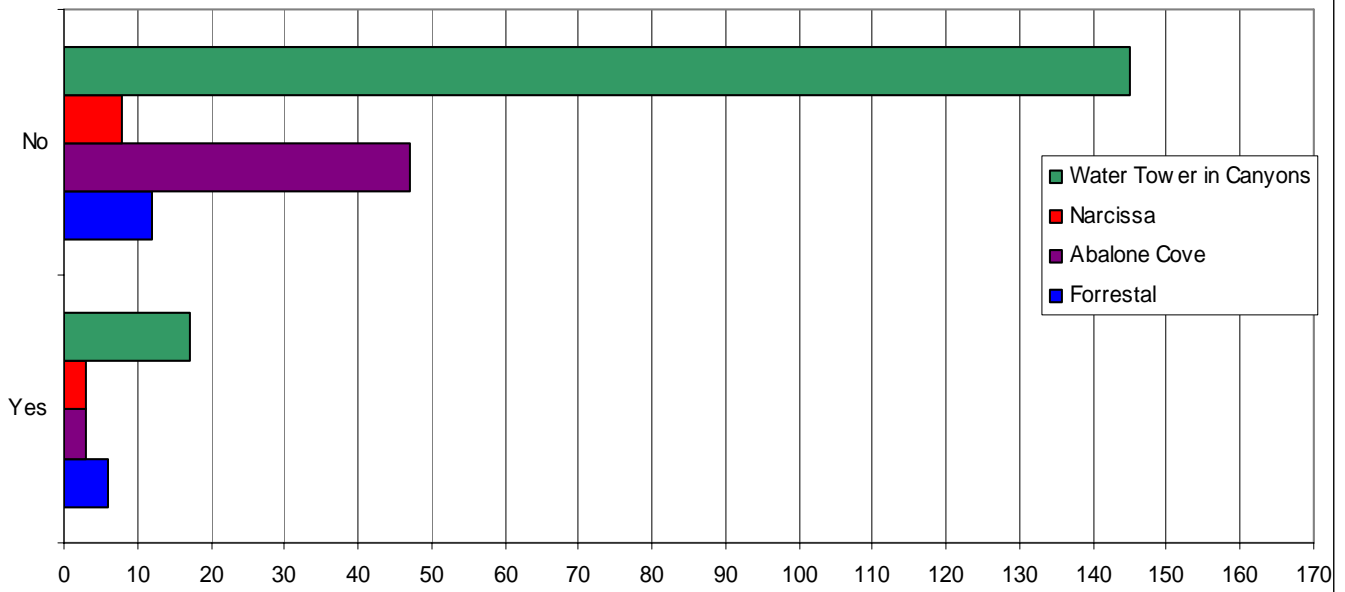
Age



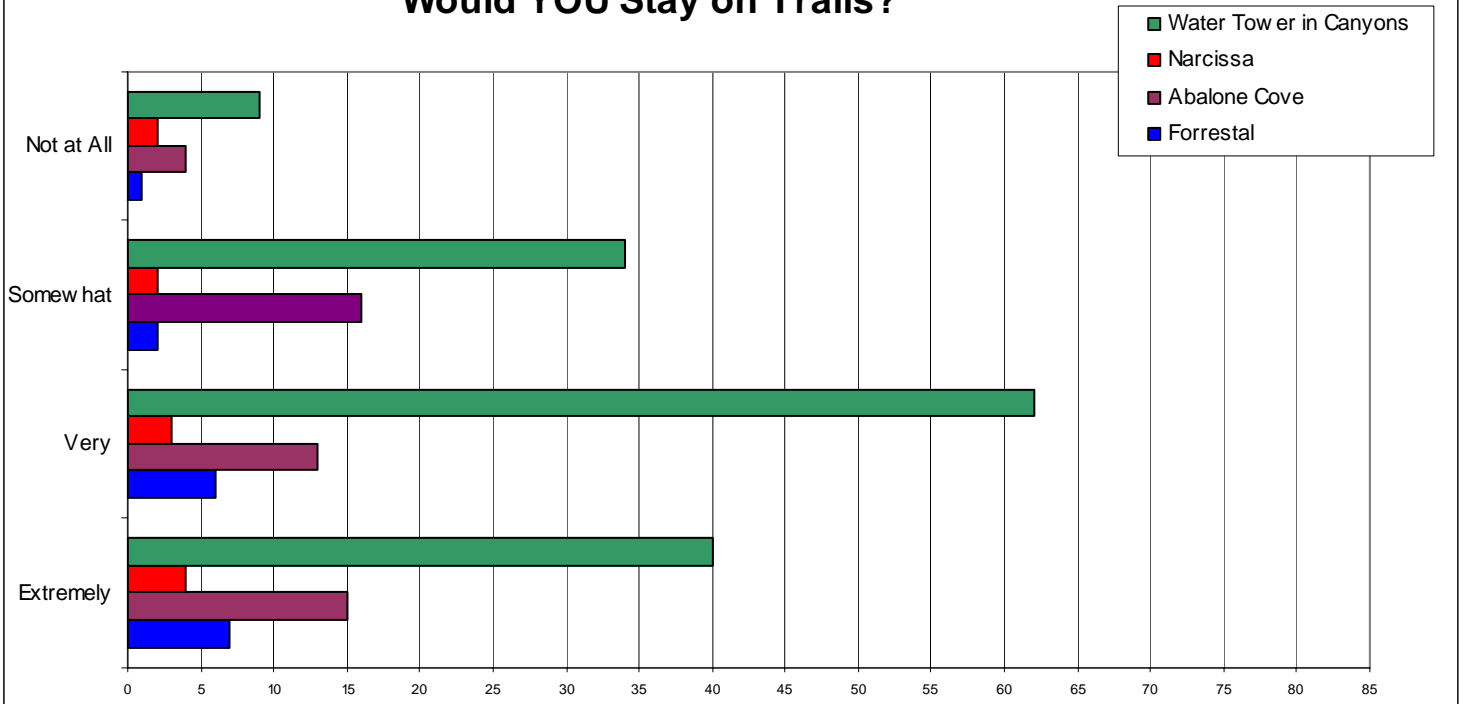
Conflict With Another Group Today



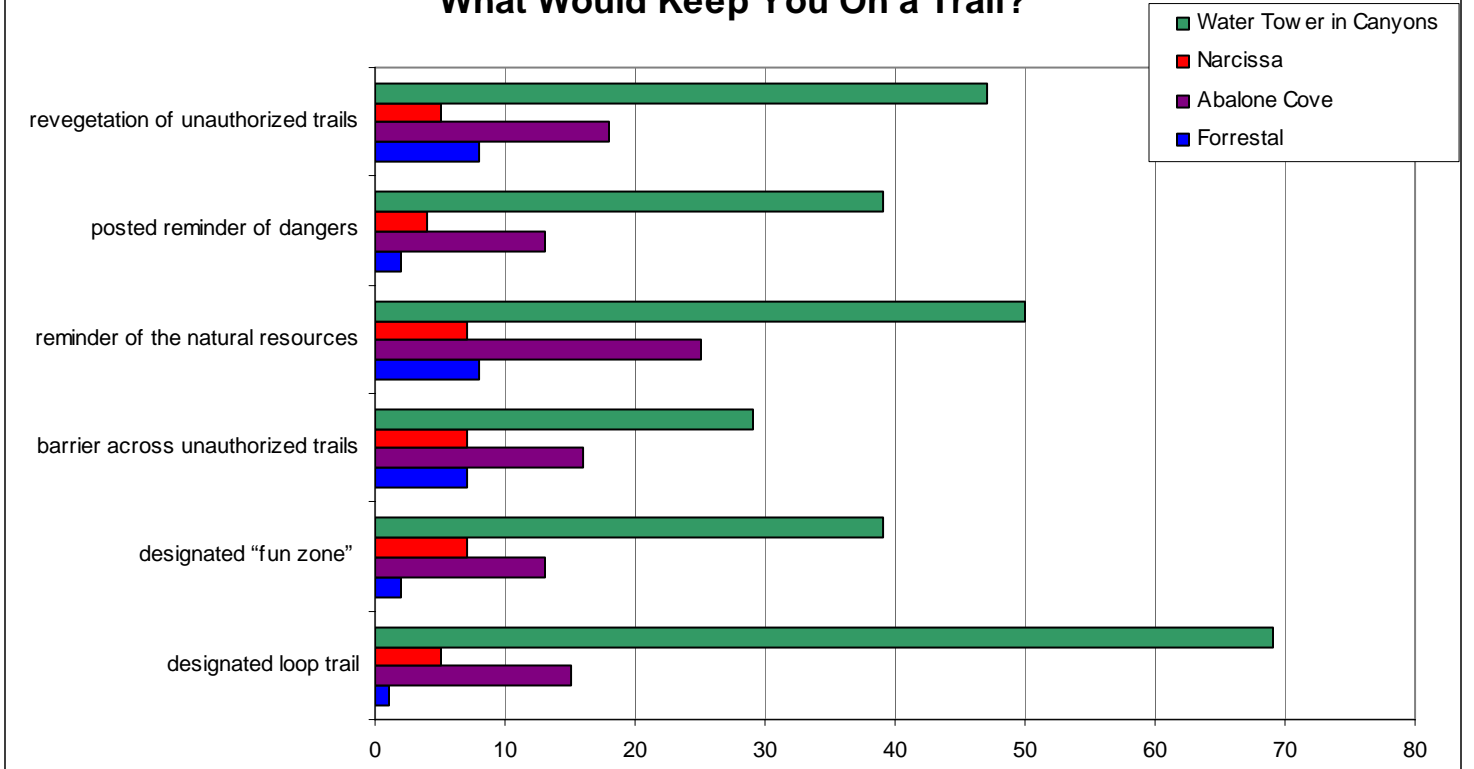
Conflict With Another Group in the Past



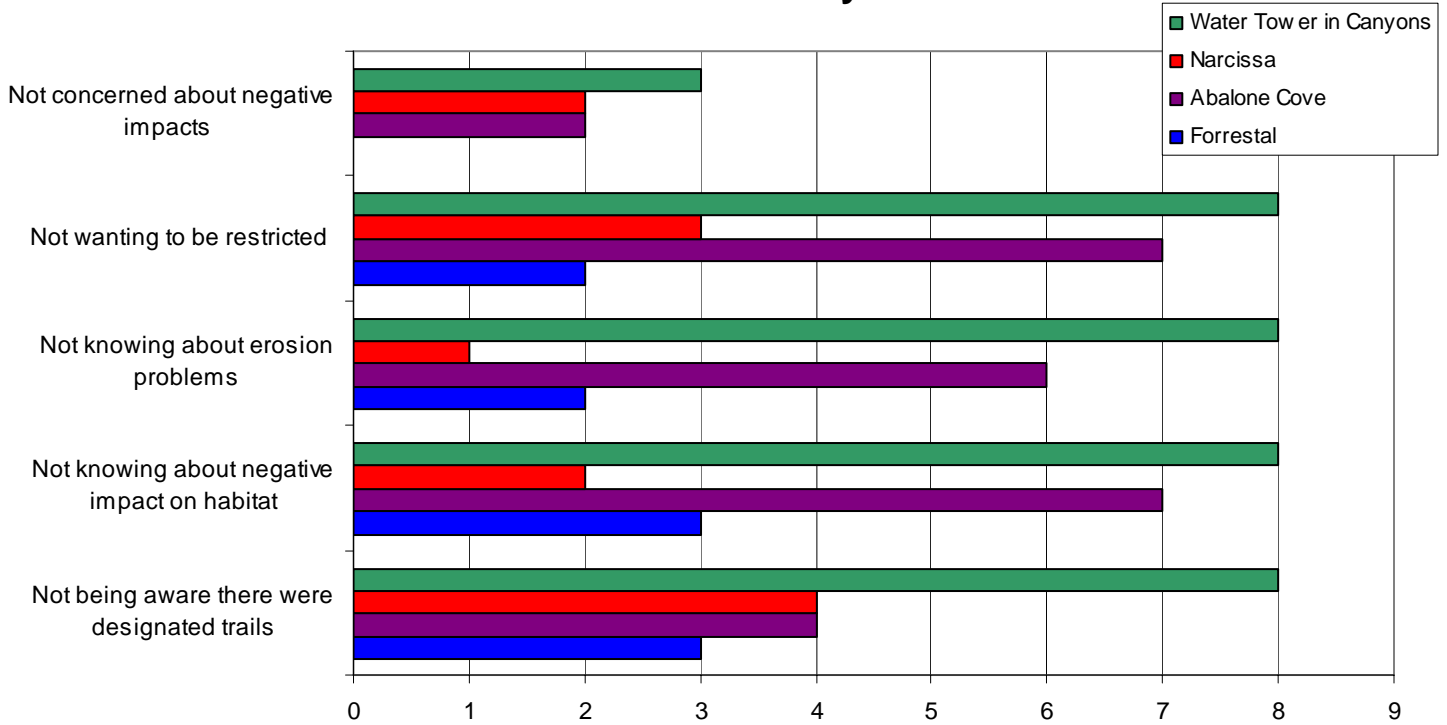
Would YOU Stay on Trails?



What Would Keep You On a Trail?



What Would Make You Stray From Trails?



Today's Activities

