



Jackson Demonstration State Forest Recreation Visitor Survey

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March 14, 2014



State Forests

Thank you

CAL FIRE JDSF Staff
Recreation Task Force Members
Cal Poly Research Assistants

Introduction

- 1990 most recent JDSF recreation master plan
 - 1987 Recreation Use Needs Study
 - Increased recreation demand past 25 plus years
 - 2008 JDSF Management Plan Recommendations
 - Administer visitor use survey
 - Develop new recreation plan

Purpose of Survey

To provide information regarding forest visitors' characteristics, attitudes, and perceptions that will assist in the development of a recreation plan to serve CAL FIRE JDSF managers and visitors over the next 10 years.

Visitor Survey Development

- **Reviews:**
 - July 2010 preliminary recreation recommendations of JDSF Recreation Task Force
 - Excerpt from 2011 JAG report on recreation
 - 1987 Recreation Use Needs Study
- **Consultation with JDSF personnel**
- **Input from Recreation Task Force July 2013**

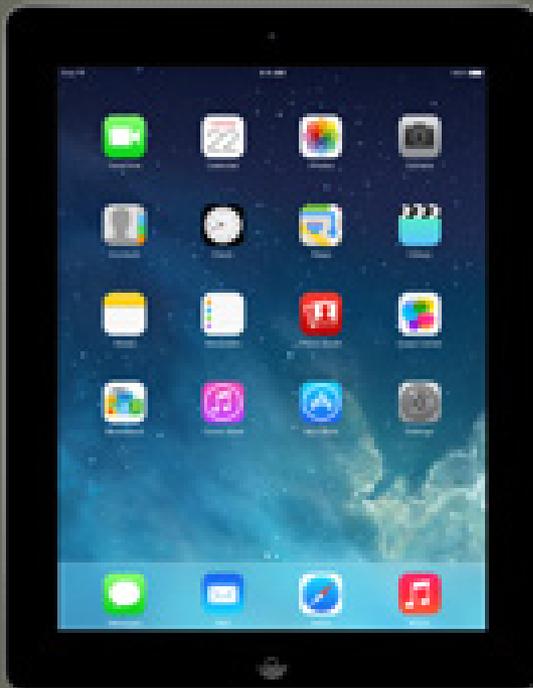
Visitor Survey

- Visitor characteristics
- Visitation history & type
- Recreation activities
- Perceived crowding
- Satisfaction with facilities & services
- Support for managerial actions
- Perceptions of problems
- Acceptability of forest conditions
- Information sources

“What other comments about JDSF would you like to share?”

Questionnaire

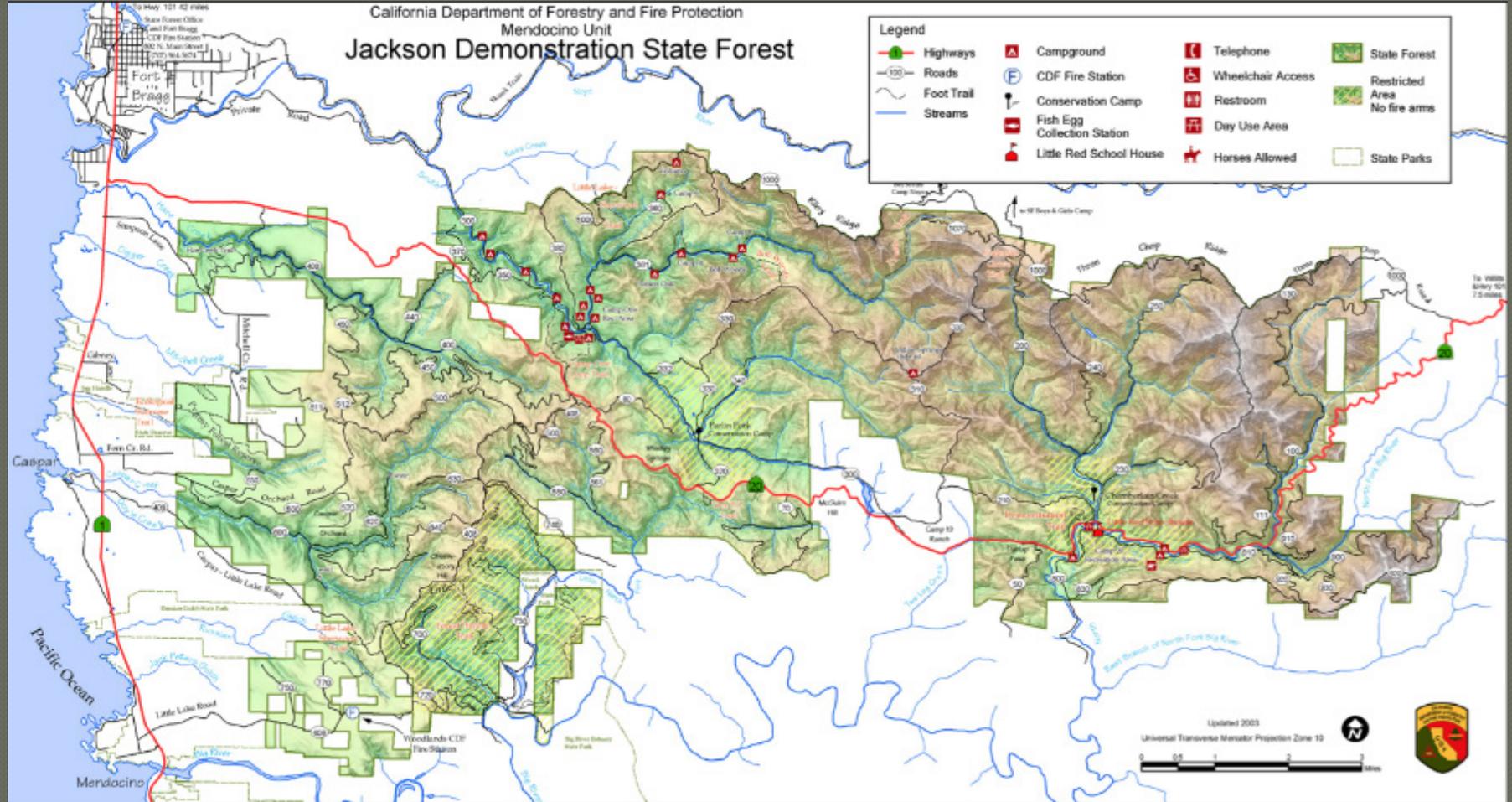
 QuickTapSurvey



Sampling Procedures

- Intercept approach
- Randomly selected days
 - July – September 2013
 - 20 weekend days
 - 10 weekdays
- Three areas of forest randomly assigned one of three time blocks
 - 10 a.m. – 12:30 p.m.
 - 1 p.m. – 3:30 p.m.
 - 4 p.m. – 6:30 p.m.

Patrol Areas A, B, C



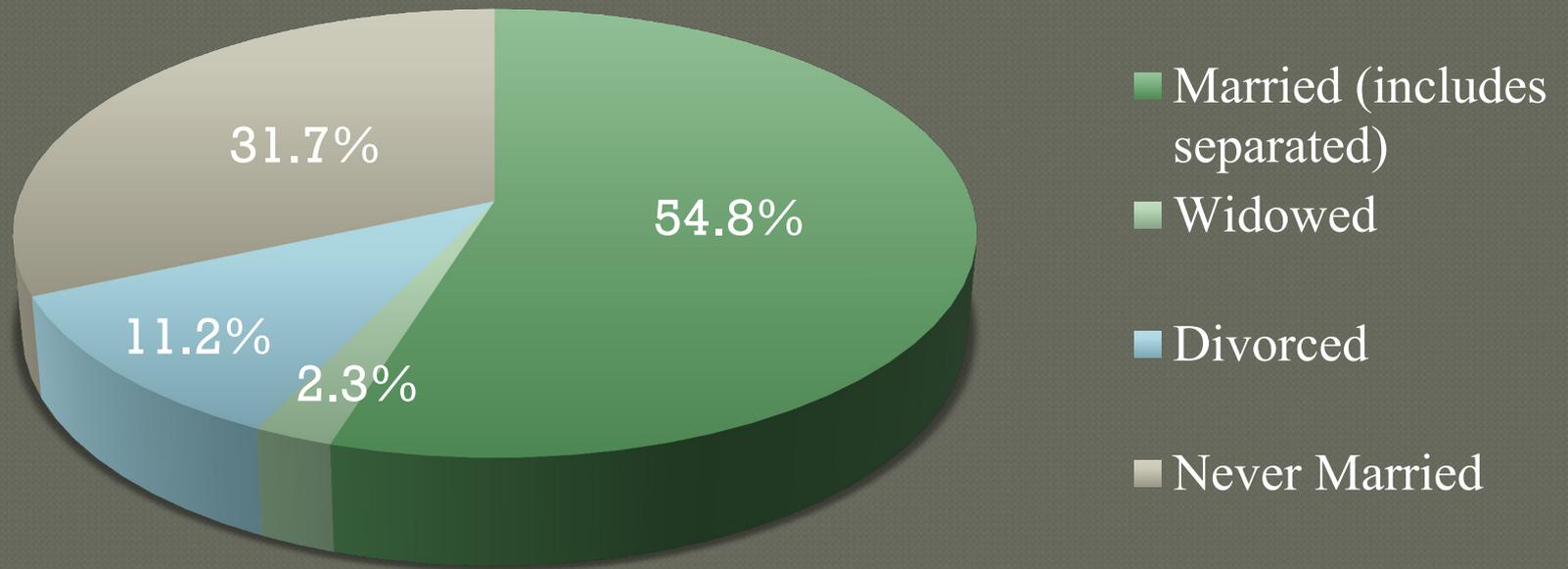
Data Analysis

- Descriptive statistics
- Frequency/percentage most socio-demographics
- Mean scores to measure:
 - Crowding, satisfaction, managerial support, problems, conditions
 - 9-point crowding scale
 - 4 and 5-point Likert-type scales

Visitor Characteristics

- 402 respondents
- Over 90% white
- 57% male
- 46 years average age
- Over $\frac{3}{4}$ some college education or higher

Martial Status



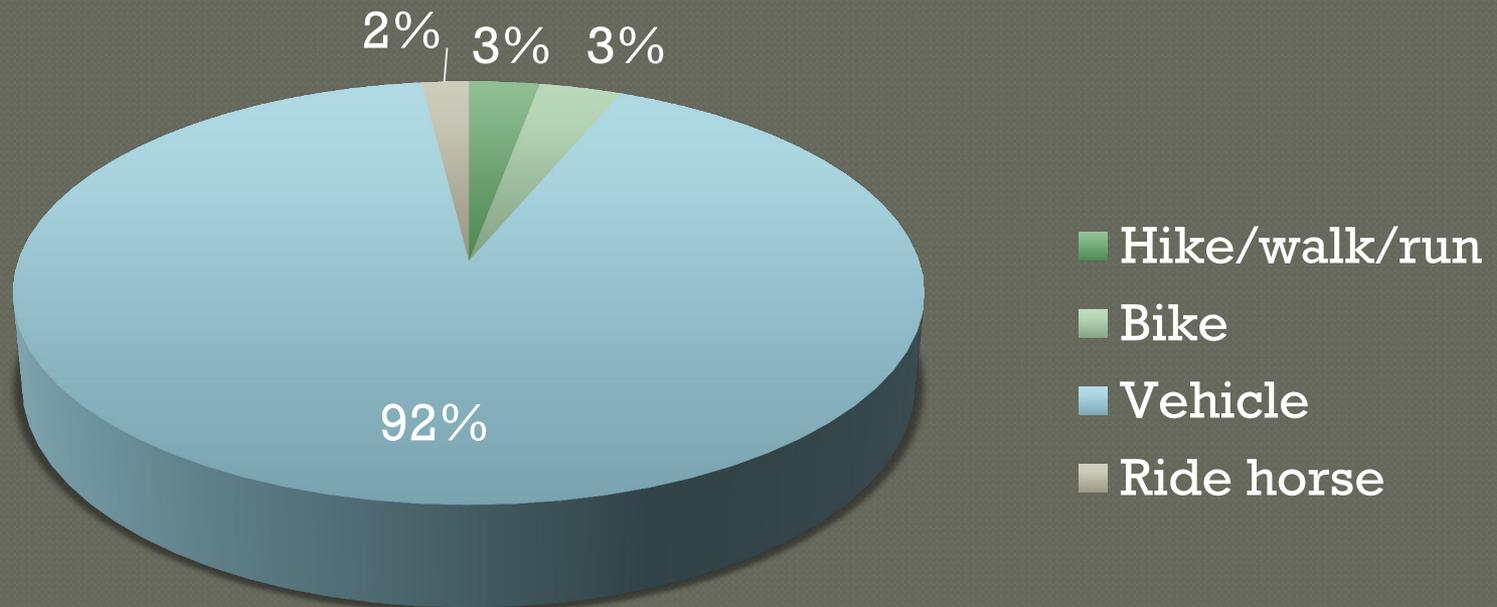
Annual Household Income

Income	<i>f</i>	%
Less than \$20,000	59	19.16
\$20,000-\$39,999	32	10.39
\$40,000-\$59,999	73	23.70
\$60,000-\$79,999	55	17.86
\$80,000-\$99,999	33	10.71
\$100,000-\$149,999	43	13.96
\$150,000 or more	13	4.22
Total	308	100.00
Prefer not to answer	58	
Non-response	36	

Residence

- 94% California
- 55% Mendocino County
- Other top counties (exclusive of Mendocino)
 - 21% Sonoma
 - 18% Lake
 - 8% San Francisco
 - 8% Contra Costa
 - 7% Sacramento

Mendocino Residents Travel to JDSF



Travel time to forest

Mean 31 minutes

Median 20 minutes

Visit Attributes

- 53% overnight visitors
- Mean group size = 5
- Day use visitors in forest about 4 hours
- Mean visit 4 days per month
- Mean nights in forest = 4
- $\frac{3}{4}$ in group with family, friends, or family & friends

Top 10 Recreation Activities

Activity	<i>f</i>	%
Camping	201	50.00
Hiking	198	49.25
Picnicking	124	30.85
Sightseeing	114	28.36
Photography	73	18.16
Mountain biking	71	17.66
Wildlife viewing	65	16.17
Swimming	63	15.67
Horseback riding	58	14.43
Target shooting with firearms	53	13.18

Top Primary Activities

Primary Activity	<i>f</i>	%
Camping	106	26.70
Hiking	62	15.62
Horseback riding	47	11.84
Mountain biking	44	11.08
Target shooting w/ firearms	38	9.57
Picnicking	33	8.31

Crowding Perceptions

	n	Mean	SD
Weekdays	369	1.83	1.54
Weekends	381	3.01	2.177

9-point scale

- 1 = Not at all crowded
- 3 = Somewhat crowded
- 6 = Moderately crowded
- 9 = Extremely crowded

Top Scores Satisfaction Facilities & Services

Facility/Service	Mean	SD
Availability of parking at campsites	4.15	0.726
Total mileage of trails	4.07	0.759
Areas for large groups in day use areas	4.04	0.622
Areas for large groups in campgrounds	3.97	0.72
Number of loop trails	3.94	0.996
Process for self-registration camping fees	3.91	0.839
Accessible trailheads to enter the forest	3.90	0.832

Low Scores Satisfaction Facilities & Services

Facility/Service	Mean	SD
Online information about recreational opportunities on the forest	3.37	1.221
Educational/interpretive programs on the forest	3.36	1.065
Printed information about recreational opportunities on the forest	3.34	1.118
Signs posting educational information	3.25	1.108
Signs posting trail information	3.22	1.208

Top Support Managerial Actions

Action	Mean	SD
Create a formal volunteer program	4.10	0.66
Designate area for archery target shooting	4.05	0.905
Restoration of the Red Schoolhouse	4.02	0.769
Install educational signs along the demonstration trails	3.97	0.769
Develop horse trailer parking	3.80	0.888
Designate trails for multiple use	3.77	0.932
Develop water facilities for horses on trails	3.77	0.937

Low Support Managerial Actions

Action	Mean	SD
Designate trails for single use (e.g. only mtn. biking)	3.58	1.137
Build a visitors center	3.25	1.18
No development of additional recreation facilities	2.88	1.225

Perceived Problems on Forest

Problem	Mean	SD
Conflicts between equestrians and hikers	2.62	1.811
Vault/pit toilets that need cleaning	2.37	1.088
Roadside dumping, garbage in forest including abandoned vehicles	2.28	1.161
Litter along a trail, at a campsite, or at picnic area	2.08	1.022
Vandalism to forest facilities/resources	2.04	1.118

Low Perceived Problems on Forest

Problem	Mean	SD
Discourteous behavior of visitors/campers	1.51	0.85
Conflicts between mountain bikers and hikers	1.51	0.864
Noise of visitors/campers	1.40	0.742
Encountering large groups of people (8+ people in a group) on a trail	1.28	0.625

Conditions Acceptability

Condition	Mean	SD
Overall condition of campsites	4.08	0.56
Overall condition of trails	4.07	0.585
Overall condition of day use areas	3.98	0.651
Overall condition of dirt/fire roads	3.92	0.673
General information signage	3.39	1.053
Vault/pit toilets	3.28	1.123

First Learn About Forest

Source	<i>f</i>	%
Friends or family	149	37.06
I'm a local resident	144	35.82
Word of mouth	73	18.16
Driving by on hwy 20	72	17.91
CAL FIRE website	18	4.48
Magazine	5	1.24
CAL FIRE office	5	1.24
Newspaper	4	1.00
At a hotel/motel/b&b	3	0.75
Radio	2	0.50

Obtain Info About Forest

Source	<i>f</i>	%
I just show up to recreate	135	33.58
Friends or family	123	30.6
Word of mouth	69	17.16
I'm a local resident	62	15.42
CAL FIRE website	42	10.45
Other website	41	10.20
CAL FIRE office	32	7.96
At a hotel	4	1.00
Newspaper	4	1.00

Comments

● Nine Categories Emerged

- Positive comments
- Personnel
- Maintenance
- Campgrounds
- Recreation conflict
- Accessibility
- Shooting range
- Signage, information, education
- Other comments

Summary

- Residents of Mendocino & neighboring counties most frequent visitors
- Visit with family &/or friends
- Most locals drive within 20 minute radius
- About 50% of visitors comprise high percentage of use
- Participation in fairly traditional natural resources based recreation activities

Crowding Conclusions

● Crowding

- Monitor carefully
- Fee structure still relatively new
- Visitation likely to increase

● Recreation Conflict & Use

- Potential from multiple sources
- Consider zoning for recreation opportunities

Facilities/Services Conclusions

- Overall Satisfaction Apparent
- Exceptions:
 - Signage
 - Access to roads
 - Availability of educational resources & information
- Consider:
 - Strategic adoption of media
 - Distribution of visitors
 - Camping reservation system

Managerial Actions Conclusions

● Support:

- Red School House restoration
- Development of volunteer programs
- Areas for shooting firearms & archery
- Improved trail systems
- Improved resources for horseback riders

Perceived Problems Conclusions

- Previous studies lack of recognition of problems & impacts
- Slight to moderate conflict between equestrians & hikers
- Maintenance issues
- Consider preventative maintenance as resources & increased staffing become available

Conditions Conclusions

- Near acceptable or above acceptable for four of six items
- Bathrooms & signage consistently mentioned

Information Sources Conclusions

- Visitors currently receive forest information primarily through personal sources & knowledge from being a local
- 10% also attain information through Internet
- Consider communication strategy
 - Personal & non-personal services
 - Incorporate various media as distribution channels

Recommendations

- Continue discussions with JAG, Recreation Task Force & other interest groups
- Consider survey as one resource for development of recreation plan
- Consider visitors' opinions & attitudes in forest management strategies



Thank you!