



Social Science Program

Expedited Approval for NPS-Sponsored Public Surveys

1. **Project Title | Submission Date:** Preliminary study of the Tread Lightly! off highway vehicle visitor education efforts on public lands. 7 / 27 / 08

2. **Abstract:** The purpose of this research is to develop and test a method for studying the effectiveness of the "Tread Lightly" off-highway vehicle (OHV) skills and ethics education program within a selection of U.S. National Park Service and other public lands. Attitudes toward recommended "Tread Lightly" principles will be investigated in two National Park System units, Big Cypress National Preserve and Canyonlands National Park, and one Bureau of Land Management site, Imperial Sand Dunes Recreation Area, using mail back surveys following a modified Dillman approach (2000).
(not to exceed 150 words)

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Project Information

5. **Park(s) For Which Research is to be Conducted:** Canyonlands National Park (CANY), Big Cypress National Preserve (BICY) Imperial Sand Dunes Recreation Area (ISDRA)

6. **Survey Dates:** 3/01/2009 (mm/dd/yyyy) to 12/15/09 (mm/dd/yyyy)

7. **Type of Information Collection Instrument (Check ALL that Apply)**

Mail-Back questionnaire **On-Site Questionnaire** **Face-to-Face Interview** **Telephone Survey** **Focus Groups**

Other (explain)

8. **Survey Justification: (Use as much space as needed; if necessary include additional explanation on a separate page.)**

Social science research in support of park planning and management is mandated in the *NPS Management Policies 2006* (Section 8.11.1, "Social Science Studies"). The NPS pursues a policy that facilitates social science studies in support of the NPS mission to protect resources and enhance the enjoyment of present and future generations (National Park Service Act of 1916, 38 Stat 535, 16 USC 1, et seq.). NPS policy mandates that social science research will be used to provide an understanding of park visitors, the non-visiting public, gateway communities and regions, and human interactions with park resources. Such studies are needed to provide a scientific basis for park planning, development, operations, management, education, and interpretive activities.

Land managers need the ability to predict and influence recreational behavior in order to manage wildlands effectively. This includes further understanding of off-highway vehicle (OHV) drivers' practices and ethics, particularly compliance with recommended practices. There is currently a lack of compliance research and literature regarding minimum-impact OHV visitor education generally and Tread Lightly! (TL!) specifically. TL! is the most widespread minimum-impact OHV education program currently in existence. Research exploring the effectiveness of TL! and other minimum-impact educational programs such as "Leave No Trace" has been described as insufficient, and the current research base and state of knowledge remains inadequate (Chavez & Knap, 2006; Vancini, 1989).

This study is designed to understand the effectiveness of the TL! message and to identify salient variables that explain OHV operators' compliance with TL! recommended practices in three different ecosystems with different types of education efforts. This research utilizes Fishbein and Ajzen's Theory of Reasoned Action (Ajzen & Fishbein, 1980). The study also seeks to investigate from what source(s) OHV visitors' learn about TL!, and whether the type of source influences behaviors (Rogers, 1995). The vast majority of measures included within the questionnaire are based on earlier work by Powell, Wright, and Vagias (2008).

The results will be utilized to inform management decisions regarding the future direction of the program and to improve existing educational tools to reach a broader segment of the OHV recreation public and enhance both enjoyment and resource protection.

9. **Survey Methodology: (Use as much space as needed; if necessary include additional explanation on a separate page.)**

(a) Respondent universe:
Adult visitors, age 18 or older, who are 2008 annual permit holders for OHV travel in BICY; 2008 backcountry OHV permit holders in Canyonlands NP; and members of the American Sands Association OHV club that supports travel to ISDRA.

(b) Sampling plan/procedures:
A systematic random sampling technique will be used to sample OHV visitors to 2 national parks and one BLM site. The three sites where data are to be collected, Big Cypress National Preserve (BICY), Canyonlands National Park (CANY), and Imperial

Sand Dunes Recreation Area (ISDRA), were selected to represent a range of ecosystems and a range of TL! education efforts regarding minimum-impact OHV practices. This variation in education efforts between research sites will allow researchers to treat each unit as a case study to gain further understanding of the impact of site-specific educational approaches.

The researchers will utilize OHV permit holder address lists at BICY (n=1865) and CANY (n=2965), and will use the 2008 American Sands Association membership list (n=29,000) as sampling frames. American Sands Association works closely with Bureau of Land Management to provide TL! educational information for ISDRA. All drivers of OHVs in BICY and CANY are required to obtain permits. A random numbers table will be utilized to identify the first individual to be selected from the mail lists and then every kth individual from the mail lists will be selected to produce a representative sample. The sampling interval will then be determined by dividing the number of 2008 permit holders/members by the necessary sample size (700 initial contacts from each site). This will yield approximately 420 valid responses from each unit which will allow for comparisons of subpopulations. A total of 420 valid responses will also assure a 95% confidence interval and provide an adequate sample to allow the researchers to conduct Structural Equation Modeling analysis which requires a larger sample size.

(c) Instrument administration:

Selected individuals will first be sent a postcard indicating their selection for the study. These individuals will then be mailed a survey using a modified Dillman approach (Dillman, 2000). Individuals will be mailed an introductory letter and the survey instrument. Ten days later those individuals who have not responded will be mailed a postcard, reminding them about the survey. Approximately two weeks following mailing of the postcard, respondents who have still not responded will be mailed a follow-up letter and a replacement questionnaire.

(d) Expected response rate/confidence levels:

An overall response rate of 60% is expected for the mail-back questionnaire. Although a 2007 survey of OHV permit holders at BICY only achieved a 46% response rate, the PI's and the NPS at BICY have undertaken extensive stakeholder outreach and allowed for the review of the research instruments to promote greater participation and trust in this project's research results. Because of this work and our experience using similar methods which have resulted in response rates of 70% or greater (Powell, 2004; Powell, Wright, & Vagias, 2008), we expect a 60% response rate.

A sample of approximately 700 individuals from each site will be mailed a self-administered survey. Approximately 420 individuals per research site are expected to complete the survey. A confidence interval of +/-5.0% is expected for each research site. (To achieve this confidence interval we need responses from 322 individuals from BCY, 341 from CANY, and 379 from ISDRA.)

(e) Strategies for dealing with potential non-response bias:

A portion of the original sample that did not return the questionnaire will be contacted via telephone in order to ascertain potential differences between those who returned a completed questionnaire and those who choose not to participate. Telephone numbers are available from OHV permits at CANY and BICY, and from the American Sands Association membership list at ISDRA. Within a reasonable effort and expense, we will attempt to complete 60 phone interviews from non-respondents from each site. Non-response bias will be checked by sampling the age, sex, and experience use history of non-respondents and statistically comparing these data with those of the respondents.(script attached in appendix).

(f) Description of any pre-testing and peer review of the methods and/or instrument (recommended):

A number of processes and procedures were undertaken to develop the Tread Lightly

Questionnaire based on recognized social science research procedures (Babbie, 2001; DeVellis, 2003; Foddy, 1993; Fowler, 1993). The TL! instrument is identical for all three study locations, except where exact locations are referenced in the questionnaire. There are, however, additional modules of questions specific to each research site included at the request of agency personnel in the respective units. (Section G in the attached questionnaire).

Specific processes included:

First, the initial draft of the TL! questionnaire was based on extensive prior research, most notably the recently completed “Leave No Trace” (LNT) study that also assessed a minimum-impact visitor education program and utilized a related theoretical framework and a similar data collection method (Powell, Wright, & Vagias, 2008). The LNT questionnaire was extensively pilot tested and refined prior to collecting data in three US National Parks in 2007/08. After analysis of these data, including writing an NPS Technical Report (Powell, Wright, & Vagias, 2008), a Ph.D. dissertation (Vagias, 2009), and three journal articles (in final draft stages) (Vagias, Powell, & Moore, a+b, Vagias & Powell), the researchers further refined the TL! questionnaire.

Secondly, a full literature review of OHV research was undertaken and an item pool was developed. Questions were adopted and refined based on their suitability for investigating TL! from past studies including: Cordell, Betz, Green, & Owens, 2005; Fly, Stephens, Askins, & Hodges, 2002; Lewis & Paige, 2006; Lord, Elmendorf, & Strauss, 2004; Schoenecker, 2006; Smail, 2007; Yankoviak, 2005. Each of these studies was reviewed and the primary authors contacted to obtain full questionnaires. After an item pool was developed, the questionnaire was constructed based on the results of the LNT study, the theoretical framework, and the research questions.

Thirdly, the TL! survey instrument was reviewed by NPS staff from Big Cypress National Reserve and Canyonlands National Park, and by BLM staff at Imperial Sand Dunes Recreation Area.

Fourthly, after review by agency personnel, ORV stakeholder groups at two of the study sites and TL! staff members at the national TL office completed an extensive review and provided written and oral comments. During this stage, the researchers attended a public BICY ORV Advisory Committee meeting in Everglades City to present the purpose of the study and how the results will be used. Questions were answered, and a subcommittee of BICY ORV enthusiasts/representatives was formed to review and comment on the questionnaire and research design. Similar outreach efforts were undertaken in ISDRA with OHV stakeholders and BLM staff via conference calls.

Next, all items in the survey, especially questions 9 and 12, were extensively reviewed by stakeholders and comments were received and incorporated. Reviewers were asked to identify questions that might elicit socially desirable answers (King & Bruner, 2000) or were confusing or poorly worded. This process had similar goals and results to cognitive testing (Conrad, Blair, & Elena, 1999; Presser, et al., 2004).

10.

Total Number of Initial Contacts | Expected Respondents:

Survey:	2100	1260
Phone:	300	180

11.

Estimated Time to Complete Instrument (mins.):

Survey:	1	15
Phone:	1	3

Total Burden Hours:

364

13. **Reporting Plan:**
- (a) General: A full technical report of results will be written and submitted to each of the three participating research sites in May 2009 (depending on approval date). Additionally, a copy of the survey report will be submitted to the NPS Social Science Program in order to be archived. Finally, subsequent peer-reviewed journal articles will be submitted in 2010.
- (b) Statistical Analyses: Data will be subjected to the following analyses upon conclusion of collection phase:
- Assessment of quality/completeness of data. This includes examination for coding errors, univariate and multivariate outliers, and distribution of missing data.
 - Descriptive statistics. This includes developing a description of the sample, comparing respondents to nonrespondents, testing the reliability of the study's scales, and correlation analysis of the study's variables.
 - Inferential statistics. This includes model building utilizing multiple regression analyses, path analysis, or structural equation modeling techniques.
- The study is designed to be a series of 3 "case studies." The sites do not represent all NPS parks where OHV use occurs. Consequently, the results cannot be generalized beyond the three parks. Nor can they be combined across the 3 study sites.

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Big Cypress National Preserve Off-Road Vehicle Visitor Study

Directions To Respondent

The questionnaire is designed to explore your attitudes and opinions regarding Off-Road Vehicle (ORV) operation at Big Cypress National Preserve (BICY). The aim of this study is to help evaluate and subsequently improve ORV education efforts at BICY.

Results will be reported in broad statistical terms only to help improve visitor education. No individual names will be linked with answers and there are no 'correct' or 'incorrect' answers so please feel free to express your candid views and opinions. Finally, in this study the term ORV refers to vehicles such as street legal 4X4s, as well other motorized vehicles (if legally appropriate for your location), including quads, swamp buggies, airboats, ATVs, UTVs, etc. This survey should take approximately 15 minutes to complete.

[PLEASE NOTE: This questionnaire is for BICY. The other questionnaires for CANY & ISDRA will be identical except the name of the park will be changed. In addition, section G will be different for each survey, and each version is included below.]

Section A: Your ORV Experience & Personal Use (Topic Area 2)

1. In 2008, how many trips did you make to Big Cypress to engage in ORV operation?
_____ (write in #)

2. When driving your ORV in Big Cypress:
◇ How many ORVs are normally in your group? _____
◇ How many individuals, including yourself, are normally in your group? [1.GR3] _____

3. On your most recent ORV trip, how long do you spend in Big Cypress? Please list partial hours as $\frac{1}{4}$, $\frac{1}{2}$ or $\frac{3}{4}$. [3.TRIPC11]
◇ Number of **hours**, if less than 24 _____
◇ Number of **days**, if more than 24 _____

4. How many years have you been operating an ORV? _____ (write in #)

5. How many days in the past 12 months did you operate an ORV? (please check one answer)
____ 0-5
____ 6-10
____ 11-15
____ 16-20
____ 21-25
____ Over 25

6. How do you rate your skill level in driving an ORV? (please circle one answer)
1 2 3 4 5 6 7
Novice Intermediate Expert

7. Please indicate if you have done any of the following at Big Cypress in the past 12 months. (check all that apply)

- Volunteered to do trail maintenance -> how many days? _____
- Participated in an organized clean-up > how many days? _____
- Donated money for protection/maintenance > how many dollars? _____

8. What type of ORV do you primarily drive at Big Cypress? (please check one answer)

- Street Legal 4x4
- Swamp buggy
- ATV / UTV (quad, etc)
- Airboat
- Other (please describe)

Section B: Opinions & Attitudes about ORVs (Topic Area 6)

9. We would like to know more about your opinions regarding the following statements. Please rate each statement on the 7-point scale using '1' *Strongly Disagree* to '7' *Strongly Agree*.

(please circle one number per statement)	Strongly Disagree			Neutral			Strongly Agree		
I believe it is important to walk challenging terrain before attempting to navigate it in my ORV	1	2	3	4	5	6	7		
Obtaining BICY ORV regulations before driving my ORV is important.	1	2	3	4	5	6	7		
Safety gear appropriate for my ORV and driving conditions is essential.	1	2	3	4	5	6	7		
If I am driving in a designated ORV area, I do not need to worry about sensitive animals and plants	1	2	3	4	5	6	7		
My ORV does not bother wildlife	1	2	3	4	5	6	7		
I feel a responsibility to pick up trash left by others	1	2	3	4	5	6	7		
Washing my vehicle after riding is unnecessary.	1	2	3	4	5	6	7		
Driving my ORV where they are prohibited may lead to more areas of BICY being closed.	1	2	3	4	5	6	7		
It is my right to drive my ORV where I want on public lands.	1	2	3	4	5	6	7		
If I am in a designated ORV area, decreasing speed to reduce noise and dust is unnecessary.	1	2	3	4	5	6	7		
All ORV drivers should take a skills and safety class to operate a vehicle in BICY.	1	2	3	4	5	6	7		
It is unnecessary to slow my ORV down when I see wildlife.	1	2	3	4	5	6	7		
Driving my ORV where they are not allowed leaves no lasting environmental impacts to BICY.	1	2	3	4	5	6	7		
A single ORV traveling alone is unsafe	1	2	3	4	5	6	7		
Scouting an area before driving at high speed is essential.	1	2	3	4	5	6	7		
ORV driving and safety courses are a waste of my time	1	2	3	4	5	6	7		

If I am in a designated ORV area, the noise from my vehicle shouldn't bother anyone.	1	2	3	4	5	6	7
It is unnecessary to follow speed limits if I am driving in a designated ORV area.	1	2	3	4	5	6	7
There are endangered animals and plants in the area where I drive my ORV.	1	2	3	4	5	6	7
ORV operators should be allowed to drive wherever they want in BICY.	1	2	3	4	5	6	7
It is important to avoid driving over vegetation.	1	2	3	4	5	6	7
Mufflers should be required on all ORVs.	1	2	3	4	5	6	7
I am opposed to being told how fast I can drive.	1	2	3	4	5	6	7
It is acceptable to drive off designated trails to avoid obstacles	1	2	3	4	5	6	7

Section C: Motivation for Operating ORVs at BICY (Topic Area 3)

10. Individuals engage in ORV operation at Big Cypress for a number of reasons. Using the chart below, please indicate which of the following motivate you to operate your ORV at Big Cypress and the importance of each reason for which you answer 'yes'.

	Reason		Please circle one	If yes - >	Importance						
	No	Yes			Not very important	Neutral			Extremely Important		
Trail / Leisure riding	No	Yes			1	2	3	4	5	6	7
Access to otherwise inaccessible areas	No	Yes			1	2	3	4	5	6	7
Camping	No	Yes			1	2	3	4	5	6	7
Sport /recreation riding	No	Yes			1	2	3	4	5	6	7
Family / Friends Outing	No	Yes			1	2	3	4	5	6	7
Hunting / Fishing	No	Yes			1	2	3	4	5	6	7
Wildlife Viewing	No	Yes			1	2	3	4	5	6	7
Other	No	Yes			1	2	3	4	5	6	7

Section D: Behavioral Intentions (Topic Area 6)

11. On your next ORV outing to Big Cypress, to what extent do you plan to do the following?

(please circle one answer for each item)	Definitely DO NOT Intend to:			Neutral			Definitely DO Intend to:		
Pick up trash left by others	1	2	3	4	5	6	7		
Drive only on designated trails (areas) in Big Cypress	1	2	3	4	5	6	7		

Slow down around other ORVs	1	2	3	4	5	6	7
Wash my vehicle after visiting Big Cypress	1	2	3	4	5	6	7
Take an ORV safe operators course	1	2	3	4	5	6	7
Approach wildlife to get a better view	1	2	3	4	5	6	7
Ride off of designated trails (areas)	1	2	3	4	5	6	7
Pack out my group's trash	1	2	3	4	5	6	7
Run over vegetation	1	2	3	4	5	6	7
Learn all rules/regulations before driving at Big Cypress	1	2	3	4	5	6	7
Seek out information about the endangered animals and plants in the area	1	2	3	4	5	6	7

Section E: ORV Influences & Experiences (Topic Area 6)

12. We would like to know more about your opinions regarding the following statements. Please rate each statement on the 7-point scale using '1' *Strongly Disagree* to '7' *Strongly Agree*.

(please circle one number per statement)	Strongly Disagree			Neutral			Strongly Agree
The opinions of my friends influence my driving style at Big Cypress.	1	2	3	4	5	6	7
Early in life, I spent time engaged in mechanized recreational activities like four wheeling, snowmobiling and/or boating.	1	2	3	4	5	6	7
I trust the NPS (ranger) staff at Big Cypress .	1	2	3	4	5	6	7
In the next year, I intend to volunteer with the NPS for one day to maintain and improve ORV designated areas/trails.	1	2	3	4	5	6	7
I would not alter my ORV operating style, regardless of what others in my group may say or do.	1	2	3	4	5	6	7
If asked, my ORV friends would think that donating money for the improvement and conservation of Big Cypress is a good idea.	1	2	3	4	5	6	7
If I knew my ORV was harming wildlife I would not operate my vehicle there	1	2	3	4	5	6	7
Members of my group strongly influence where I drive at Big Cypress.	1	2	3	4	5	6	7
I have little respect for the NPS staff at Big Cypress.	1	2	3	4	5	6	7
Early in life I spent time in the outdoors enjoying nature.	1	2	3	4	5	6	7
Donating money for the improvement and conservation of Big Cypress is worthwhile.	1	2	3	4	5	6	7
My friends would discourage me from breaking Big Cypress ORV regulations.	1	2	3	4	5	6	7
If I was told my driving style damaged the environment, I would change my behavior.	1	2	3	4	5	6	7

Volunteering with the NPS to maintain and improve ORV designated areas/trails is beneficial.	1	2	3	4	5	6	7
Early in life I spent time hunting.	1	2	3	4	5	6	7
I encourage my friends to donate money for the improvement and conservation of Big Cypress.	1	2	3	4	5	6	7
In the next year, I intend to donate money to the NPS for the improvement and conservation of Big Cypress.	1	2	3	4	5	6	7
I think doing what the NPS says is important when driving my ORV in Big Cypress.	1	2	3	4	5	6	7
If I knew my ORV driving was bothering other visitors, I would go elsewhere.	1	2	3	4	5	6	7
My friends think volunteering with the NPS to maintain and improve ORV designated areas/trails is a good idea.	1	2	3	4	5	6	7

Section F: Communication & Education (Topic Area 6)

13. Have you ever heard of Tread Lightly! (TL!)? (please check one answer)

___ No (if NO, please skip to Section G)

___ Yes ◊ I first heard of Tread Lightly! in _____ (year)

14. How would you describe your current knowledge of the Tread Lightly! Principles (please circle one number)

1	2	3	4	5	6	7
No Knowledge			Average Knowledge			Expert Knowledge

15. Please provide your opinions regarding the Tread Lightly! ORV message. (Topic Area 5)

(please circle one number per statement)	Strongly Disagree	neutral				Strongly Agree	
The TL! message made me think about ways to minimize impacts caused by my ORV	1	2	3	4	5	6	7
The TL! principles are too general	1	2	3	4	5	6	7
TL! provides useful information for minimizing environmental impacts while operating my ORV in Big Cypress	1	2	3	4	5	6	7
The TL! educational message insults my intelligence	1	2	3	4	5	6	7
TL! guidelines provide relevant information on how best to drive my ORV while in Big Cypress	1	2	3	4	5	6	7
I learned new information on how to reduce my ORV's impact from TL!	1	2	3	4	5	6	7
The TL! educational message assumes ORV operators cause negative environmental impacts	1	2	3	4	5	6	7
The TL! educational program influences my ORV driving behaviors	1	2	3	4	5	6	7

16. Have you used any of the following sources to learn about Tread Lightly! If yes, indicate how much you learned about TL! from the source? (Topic Area 3 and 5)

(Please check yes or no for each item)	Used			Amount Learned						
	Please circle one			Nothing			Moderate Amount		Extensive Amount	
NPS educational talk/video	No	Yes	If yes ->	1	2	3	4	5	6	7
ORV club (website or literature)	No	Yes	If yes ->	1	2	3	4	5	6	7
Big Cypress literature	No	Yes	If yes ->	1	2	3	4	5	6	7
Tread Lightly! literature	No	Yes	If yes ->	1	2	3	4	5	6	7
Big Cypress website	No	Yes	If yes ->	1	2	3	4	5	6	7
TL! website	No	Yes	If yes ->	1	2	3	4	5	6	7
Family and friends	No	Yes	If yes ->	1	2	3	4	5	6	7
Magazines or books	No	Yes	If yes ->	1	2	3	4	5	6	7
ORV driving class / Course	No	Yes	If yes ->	1	2	3	4	5	6	7
ORV trade shows	No	Yes	If yes ->	1	2	3	4	5	6	7

SECTION G: BICY Specific Questions (Topic Area 1)

17. Where do you live? [1.RES1]

City: _____ State _____ Zip _____

Country (if not US): _____

-- If other than Florida, how many months per year do you reside in Florida? _____

18. How many past and present generations of your family have enjoyed ORV recreation in Big Cypress? _____

SECTION G: CANY Specific Questions (Topic Area 7)

Consider the following hypothetical situation. Suppose Canyonlands experiences a budget shortfall and must consider changes in its operations. Please indicate your support or opposition to the following:

(Please circle one number per statement)	Strongly Oppose			Neutral			Strongly Support	
Closing NPS vault toilets and requiring overnight trips to carry and use a portable toilet system	1	2	3	4	5	6	7	
Charging a \$500 fee per incident for backcountry rescue/aid	1	2	3	4	5	6	7	
Limiting motorized day use of designated trails/roads	1	2	3	4	5	6	7	

22. What is your race? [1.RACE/ETH3] (please select on or more)
- | | |
|---|--|
| <input type="checkbox"/> American Indian or Alaska Native | <input type="checkbox"/> Asian |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> Native Hawaiian or other Pacific Islander |
| <input type="checkbox"/> White | |
23. Please indicate the highest level of education you have completed. Please mark one. [1.ED1]
- | | |
|--|--|
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Bachelor's Degree |
| <input type="checkbox"/> High School Diploma/GED | <input type="checkbox"/> Graduate Degree |
| <input type="checkbox"/> Some college | |

Concluding Comments

Is there anything else you would like to tell us about ORVs, Tread Lightly!, and/or BICY? Please include any additional thoughts or comments you may have below.

PRIVACY ACT and PAPERWORK REDUCTION ACT statement:

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better serve the public. Response to this request is voluntary. No action will be taken against you for refusing to supply the information requested. Your name is requested for follow-up mailing purposes only. When analysis of the questionnaire is completed, all name and address files will be destroyed. Thus, permanent data will be anonymous. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Burden estimate statement: Public reporting for this form is estimated to average **15** minutes per response.

Direct comments regarding the burden estimate or any other aspect of this form to:

Garry Oye, 1201 Eye (I) Street, 10th Floor Room 1047, Washington D.C., 20005; Garry_Oye@nps.gov

To be mailed to all respondents 1 week before the questionnaire is mailed.

Dear Big Cypress National Preserve ORV Permit Holder,
You were recently selected to participate in an ORV visitor study. The survey will be mailed to you in one week. Your response is very important to the success of this study, and we hope you will take the time to participate. If for any reason you would rather not participate, please email us at rbp@clermson.edu or call 864.656.0787. Many thanks for your support.

All the best,
Robert Powell
Clemson University

Gary Oye
Chief – Wilderness Stewardship and Recreation
Management Division
National Park Service
Washington D.C.

Dear Big Cypress National Preserve ORV Permit Holder,
You were recently selected to participate in an ORV visitor study. The survey will be mailed to you in one week. Your response is very important to the success of this study, and we hope you will take the time to participate. If for any reason you would rather not participate, please email us at rbp@clermson.edu or call 864.656.0787. Many thanks for your support.

All the best,
Robert Powell
Clemson University

Gary Oye
Chief – Wilderness Stewardship and Recreation
Management Division
National Park Service
Washington D.C.

To be mailed to all respondents when the questionnaire is mailed.

< to be printed on NPS Letterhead provided by NPS Wilderness Stewardship & Recreation Management Division >

**United States Department of the Interior
National Park Service**

FALL 2008

Dear Big Cypress National Preserve (BICY) ORV Permit Holder:

Thank you for your willingness to participate in this important study. Many individuals enjoy backcountry ORV experiences in BICY and we would like for these to remain high-quality. For this reason, the National Park Service and researchers from Clemson University are interested in finding out more about your attitudes toward ORV driving in BICY. The information gained from this study will only be used to assist us in improving the provision of education at BICY. The final data for this study will be reported in broad statistical terms only, and your name will not be linked to your answers.

This questionnaire is being distributed to a select number of ORV visitors, so your participation is essential! The questionnaire should take approximately 15 minutes to complete. When you are finished, please place it in the enclosed postage-paid envelope and drop in any mailbox. After we receive your questionnaire, we will remove your name from our list.

Your response is very important to the National Park Service. We ask you to complete the enclosed survey independently. If you have any further questions about this study or need a replacement please call Dr. Bob Powell at (864) 656-0787, email: rbp@clemson.edu. He can also be reached at:

Department of Parks, Recreation and Tourism Management
263 Lehotsky Hall
Clemson University, Clemson, SC 29634

Thank you in advance for your participation.

Sincerely,

Gary Oye
Chief – Wilderness Stewardship and Recreation Management Division
National Park Service
Washington D.C.

CLEMSON
UNIVERSITY

To be mailed to non-respondents 10 days after the questionnaire is mailed.

Dear BICY ORV Permit Holder,
Recently we sent you an ORV visitor questionnaire. If you filled it out, thank you. If not, this card is a friendly reminder and appeal to ask that you please fill out and return the ORV Visitor Survey. Your response is very valuable to the success of this study and we hope you will take the time to participate. If you misplaced the survey and would like another copy please email us at rbp@clemson.edu . I hope to hear from you soon.

All the best,
Robert Powell
Wade Vagias
Clemson University

Dear BICY ORV Permit Holder,
Recently we sent you an ORV visitor questionnaire. If you filled it out, thank you. If not, this card is a friendly reminder and appeal to ask that you please fill out and return the ORV Visitor Survey. Your response is very valuable to the success of this study and we hope you will take the time to participate. If you misplaced the survey and would like another copy please email us at rbp@clemson.edu . I hope to hear from you soon.

All the best,
Robert Powell
Wade Vagias
Clemson University

Dear BICY ORV Permit Holder,
Recently we sent you an OV visitor questionnaire. If you filled it out, thank you. If not, this card is a friendly reminder and appeal to ask that you please fill out and return the ORV Visitor Survey. Your response is very valuable to the success of this study and we hope you will take the time to participate. If you misplaced the survey and would like another copy please email us at rbp@clemson.edu . I hope to hear from you soon.

All the best,
Robert Powell
Wade Vagias
Clemson University

Dear BICY ORV Permit Holder,
Recently we sent you an ORV visitor questionnaire. If you filled it out, thank you. If not, this card is a friendly reminder and appeal to ask that you please fill out and return the ORV Visitor Survey. Your response is very valuable to the success of this study and we hope you will take the time to participate. If you misplaced the survey and would like another copy please email us at rbp@clemson.edu . I hope to hear from you soon.

All the best,
Robert Powell
Wade Vagias
Clemson University

To be mailed to non-respondents with another questionnaire 3 weeks after the original questionnaire is mailed.

< Printed on NPS letterhead >
< Insert date here >

Dear OHV Visitor,

Several weeks ago we sent you an ORV visitor questionnaire. To the best of our knowledge, you have not yet responded. If you completed and mailed your questionnaire within the last few days, thank you. Otherwise, this letter is an appeal to ask that you please fill out and return the enclosed questionnaire, which will provide useful information to Big Cypress National Preserve (BICY) for improving visitor education and off-road vehicle (ORV) management.

Your responses to this survey are very important because you are one of a select group of people who were chosen to represent the attitudes and opinions of BICY ORV visitors. We recognize that your time is valuable, but we hope that you will agree to take part in this voluntary survey. The final data for this study will be reported in broad statistical terms only and your name will not be linked to your answers.

Finally, we hope you find the enclosed survey interesting to fill out. When you have completed the survey, please place it in the postage paid envelope and drop it in any mailbox. If you have any questions regarding the survey or would like information on the studies' results, please contact me at rpb@clmson.edu or Wade Vagias at waddev@clmson.edu.

Thank you very much for your help with this valuable study.

Sincerely,

Robert Powell and Wade Vagias
Clemson University,
Department of Parks, Recreation, and Tourism Management

Non-Response Phone Interview Form

Hello. This is _____ calling from the Department of Parks, Recreation, and Tourism Management at Clemson University, regarding your recent trip to _____ National Park.

Could I speak to _____?

(If not available) Could I arrange a time to call back?

(If available) I am working with the National Park Service to try to better understand experiences of off-highway vehicle operators to Big Cypress National Preserve / Canyonlands National Park / Imperial Sand Dunes National Recreation Area. I know you may have been too busy to fill out the questionnaire that was mailed to you, but I wondered if you could spend about 5 minutes now with me answering a few key questions?

(IF NO, FIND OUT WHEN IT WOULD BE CONVENIENT TO CALL AGAIN.)

INTERVIEW: Before we begin, I want to assure you that the U.S. Office of Management and Budget has approved this research under the Paperwork Reduction Act, and the control number and expiration date, as well as additional information about this survey and its approval are available at your request.* All of your answers are completely voluntary and your responses will be anonymous.

1. Did you operate an OHV/ORV in Big Cypress National Preserve / Canyonlands National Park / Imperial Sand Dunes National Recreation Area in 2008?

- Yes
- No

2. What is your age? _____ YEARS

3. What is the highest level of education you have completed. Please mark one. [1.ED1]

- | | |
|--|--|
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Bachelor's Degree |
| <input type="checkbox"/> High School Diploma/GED | <input type="checkbox"/> Graduate Degree |
| <input type="checkbox"/> Some college | |

4. In 2008, how many trips did you make to Big Cypress National Preserve / Canyonlands National Park / Imperial Sand Dunes National Recreation Area? _____

***Additional Information Provided upon Request.**

OMB Approval number:	(Not yet assigned)
Expiration Date:	(Not yet assigned)
Person Collecting and Analyzing Information:	Robert Powell Clemson University 263 Lehotsky Hall Clemson, SC 29634 864-656-0787 rbp@clemson.edu

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better serve the public. Response to this request is voluntary. No action will be taken against you for refusing to supply the information requested. The permanent data will not have your telephone number recorded. When analysis of the survey is completed, all telephone number files will be destroyed. Thus, the permanent data will be anonymous.

You may direct comments on the number of minutes required to respond, or on any other aspect of this survey to:

Garry Oye
Wilderness Stewardship and Recreation Management
1201 "Eye" St. N.W.
Washington, D.C. 20005
202-513-7090
Garry_oye@nps.gov