

**SURVEY OF RANCHER OPINIONS ABOUT  
WILDLIFE AND JAGUAR HABITAT MANAGEMENT**

**Section One: Background**

1. Are you or your family actively ranching in southern Arizona or southwestern New Mexico at this time?

- Yes
- No

2. Where do you graze your animals? Please mark all that apply:

- Private land
- BLM allotments
- U.S. Forest Service allotments
- AZ or NM State Trust Land
- Other: \_\_\_\_\_

**Paperwork Reduction Act Statement.** In accordance with the Paperwork Reduction Act (44 U.S.C. 3501), please note the following information. This survey is authorized by the Endangered Species Act. The information that you provide will be used to evaluate the practicality of a payment for ecosystem services program for the benefit of jaguar habitat in southern Arizona and southwestern New Mexico. It will also aid in the implementation of jaguar habitat conservation efforts by increasing our knowledge of landowner, rancher, and ranch manager attitudes toward jaguars and jaguar habitat management. It is our policy not to use your name for any other purpose. All names and identifying information will be removed when we compile the results, and only summary information will be reported. Your response is voluntary. We may not conduct or sponsor and a person is not required to respond to an information collection unless it displays a currently valid OMB control number. We estimate that it will take you about 30 minutes to read the instructions and complete the survey. You may send comments on any aspect of this information collection to the Information Collection Clearance Officer, U.S. Fish and Wildlife Service, 1849 C Street, NW (Mail Stop 2042-PDM), Washington D.C. 20240.

## Section Two: Range Management

3. What management practices are you currently implementing on your ranch? Please check all that apply:

- Grazing management plan
- Drought management plan
- Range monitoring
- Weed/brush management
- Invasive species management
- Prescribed burning
- Stream fencing
- Stock/wildlife ponds or tanks
- Rotational grazing
- Access control/animal exclusion
- Native grassland restoration
- Erosion control structures
- Wildlife friendly fencing
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

4. Do you currently implement management practices on your ranch specifically for the benefit of wildlife? (These management practices may also benefit range health and other aspects of your operation, but in this question we are only interested in management practices you have decided to implement because of their benefit for wildlife.)

- Yes
- No
- I have in the past, but do not currently
- I haven't in the past, but I am interested

5. Management practices that generally improve wildlife habitat may also benefit jaguars. Would you be more likely or less likely to implement wildlife habitat improvement projects if they may increase the chance of a jaguar living on or passing through your ranch?

1	2	3	4	5
Much Less Likely	Somewhat Less Likely	Neutral	Somewhat More Likely	Much More Likely

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Section Three: Jaguar Habitat in Southern Arizona and Southwestern New Mexico

The U.S. Fish and Wildlife Service recently designated critical habitat for jaguar in southern Arizona and southwestern New Mexico. Areas so designated are considered essential to the conservation of the jaguar and may need special management or protection. While areas designated as critical habitat for jaguars may be on private land, such designations affect only Federal agency actions or federally funded or permitted activities. A map of the critical habitat area is attached to this survey.

6. Is any part of your ranch (either private or public lands) located within designated jaguar critical habitat?

- Yes
- No
- Not Sure

7. What types of effects do you think designation of jaguar critical habitat will have on your operation?

**Operation costs**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

**Grazing permit renewal**

1	2	3	4	5
Much Less Difficult	Somewhat Less Difficult	No Effect More Difficult	Somewhat	Much More Difficult

**Permitted Animal Unit Months**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

**Tourism opportunities**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

**Conservation funding opportunities**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

**Livestock depredation**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

**Overall range management**

1	2	3	4	5
Negative	Somewhat Negative	No effect	Somewhat Positive	Positive

**Ability to sell or lease my land**

1	2	3	4	5
Much Easier	Somewhat Easier	No effect	Somewhat Harder	Much Harder

**Government involvement in my operation**

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

8. If you think any of the effects listed above will have a negative impact on your operation, which do you think will have the most negative impact (list up to three significant negative effects)? [Note: When we distribute the survey to ranchers, we will vary the order of appearance so some will be asked about positive impacts first and negative impacts second while others will receive the opposite order.]

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

If you think any of the effects listed above will have a positive impact on your operation, which do you think will have the most positive impact

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

9. Do you think jaguars have ever permanently resided in Arizona or New Mexico?

- Yes, I think there was at one time a native jaguar population in the Southwest
- Maybe, there isn't enough information to know if there was a native jaguar population
- No, jaguars passed through Arizona and New Mexico, but were not native
- I don't know

10. Do you think jaguars permanently reside in Arizona or New Mexico today?

- Yes, I think there are jaguars that live full time in Arizona or New Mexico.
- Maybe, I don't know if there is a permanent jaguar population
- No, jaguars photographed in Arizona and New Mexico over the past two decades are not permanent residents
- I don't know

11. Based on your knowledge of jaguars, do you think there is jaguar habitat in southern Arizona or southwestern New Mexico that is important for preventing jaguars from going extinct?

- Yes
- No

Why?: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Do you support or not support management of public and private lands in southern Arizona and southwestern New Mexico for jaguar habitat?

1	2	3	4	5
Strongly Don't Support	Don't Support	Neutral	Support	Strongly Support

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. If jaguars were not designated as an endangered species by the U.S. Federal Government, would your support for management of public and private lands for jaguar habitat in southern Arizona and southwestern New Mexico change?

1	2	3	4	5
Large Decrease	Small Decrease	No Effect	Small Increase	Large Increase

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Section Four: Conservation Incentives

Conservation incentive programs are designed to encourage conservation and good land management by paying landowners to install and maintain certain management practices. This section will ask questions about whether or not you participate in incentive programs and your interest in participating in new programs that may be developed in the future.

14. Please tell us which Farm Bill Conservation Programs you are currently participating in or have participated in in the past:

- Environmental Quality Incentives Program (EQIP)
- Wildlife Habitat Incentives Program (WHIP)
- Conservation Stewardship Program (CSP)
- Agricultural Water Enhancement Program (AWEP)
- Agricultural Management Assistance (AMA)
- Farm and Ranch Lands Protection Program (FRLPP)
- Conservation Reserve Program (CRP)
- Grassland Reserve Program (GRP)
- Wetlands Reserve Program (WRP)
- Other: \_\_\_\_\_

15. We would like to know your level of interest in conservation incentive programs and what types of programs would be most attractive to you and your ranch's business plan. Listed below are several common incentive approaches. Please tell us how likely you are to participate in each type of approach:

a) **Cost-Share:** Incentive cost-share payments for implementation of conservation practices, similar to Farm Bill programs like EQIP (Environmental Quality Incentives Program) and WHIP (Wildlife Habitat Improvement Program).

1	2	3	4	5
Not Interested	Probably Not Interested	Neutral	Probably Interested	Very Interested

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b) **Management Incentives:** Incentive payments similar to Farm Bill programs, but that *do not* require you to provide a cost-share. The full cost of conservation practices is paid and you are not responsible for any of the cost.

1	2	3	4	5
Not Interested	Probably Not Interested	Neutral	Probably Interested	Very Interested

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c) **Conservation Contracts with Annual Payments:** Incentive payments, including ongoing per-acre “rental payments,” to implement a management plan for the benefit of wildlife on all or a portion of your ranch for a specific period of time. Typically, to compensate for participation in the program, you will receive an initial payment at the time of sign-up and annual “rental” payments based on acreage enrolled. You retain ownership and control of your land. The management agreement is not permanent, but does require a minimum commitment period; e.g., 20 years. The value of the rental payment and the length of the contract may be based on negotiation between you and the “renter,” the rental value of the land for other uses, or habitat quality.

1	2	3	4	5
Not Interested	Probably Not Interested	Neutral	Probably Interested	Very Interested

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

d) **Credit Markets:** Some conservation incentive programs pay landowners based on how much of something they provide. These programs allow you to generate “credits” that you can sell like a commodity. For example, you implement a management practice that results in gains in wildlife habitat. The amount of habitat is measured and you are given credits for the amount of habitat created. You can then sell these credits to a buyer who wants to invest in this type of habitat. The buyer may be a private citizen, foundation interested in conservation, or a government agency that wants to provide incentives to private landowners for conservation. The value of the credit is determined through a negotiation between you and the buyer. Credit programs generally require a long-term commitment from the landowner to maintain the habitat through a contract or permanent conservation easement.

1	2	3	4	5
Not Interested	Probably Not Interested	Neutral	Probably Interested	Very Interested

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

e) Thinking about the four options presented above, please rank your interest in each program from highest to lowest. Place a “1” in the box next to your preferred option, a “2” next to your second choice, a “3” next to your third choice, and a “4” next to the choice you are least interested in.

- Cost-Share Programs:** similar to EQIP
- Management Incentives:** A program that pays the full cost of management practices, but nothing more
- Conservation Contracts:** A program that pays for implementation of a management plan, plus a yearly payment based on the number of acres enrolled
- Credit Markets:** A program that pays you based on the number of credits generated on your ranch, such as carbon credits

16. Based on what you understand about the conservation incentive programs described above, are you interested in learning more about how these programs work?

- Yes
- No

17. If you knew that participation in a conservation incentives program would require you to make management changes that would improve habitat for federally-designated endangered or threatened species on your ranch, how would your interest in participation change?

1	2	3	4	5
Much Less Interested	Somewhat Less Interested	No effect	Somewhat More Interested	Much More Interested

18a. Some conservation incentive programs, such as Farm Bill programs, are funded by the Federal Government. Programs funded by Federal dollars must comply with Federal environmental laws, including the Endangered Species Act. If you knew a conservation incentives program was federally funded, would you be more or less likely to participate?

1	2	3	4	5
Much Less Likely	Somewhat Less Likely	Neutral	Somewhat More Likely	Much More Likely

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

18b. A Safe Harbor Agreement is an agreement between the U.S. Fish and Wildlife Service and a private landowner. Safe Harbor Agreements allow you to implement wildlife management practices with assurances from the U.S. Fish and Wildlife Service that you will not be subject to new land use restrictions if an endangered species begins to use your land. When a Safe Harbor Agreement is established, an inventory of endangered species is conducted before you implement any new management practices. In the future, you are allowed to return your land to the same status as existed at the time of the inventory, even if it harms endangered species that have arrived on your ranch during the period you were managing for wildlife habitat. If the U.S. Fish and Wildlife Service signed a Safe Harbor Agreement with you as part of your participation in a conservation incentives program, would your willingness to participate in a federally funded conservation incentives program change?

- My opinion is unchanged



- I'm more interested
- I'm less interested

18c. Private foundations, public donations, and other sources have also been used to finance conservation incentive programs using non-Federal dollars. If you knew a conservation incentive program was 100% privately funded, would you be more likely or less likely to participate than in a federally funded program?

1	2	3	4	5
Much Less Likely	Somewhat Less Likely	Neutral	Somewhat More Likely	Much More Likely

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

19. What factors might prevent you from participating in a conservation incentive program, if any? Please check all that apply:

- I don't need incentives for management
- Land use/Permit restrictions
- Too complicated
- Not interested
- Doesn't fit my business plan
- Increased risk of having endangered species on my ranch
- Limits management flexibility
- Don't know enough about how it works
- Other: \_\_\_\_\_

20. Whom would you trust to manage a conservation incentive program in southern Arizona and southwestern New Mexico? Mark all that apply:

- Arizona Game and Fish
- New Mexico Game and Fish
- Natural Resources Conservation Service (NRCS)
- Regional natural resources conservation districts (e.g., Whitewater Draw NRCD)
- University of Arizona Cooperative Extension
- New Mexico State Cooperative Extension
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Bureau of Land Management
- Regional land trust (e.g., Arizona Land and Water Trust)
- Conservation organization (e.g., The Nature Conservancy)
- County government
- Other: \_\_\_\_\_

**Section Five: Depredation**

21. How concerned are you about depredation by mountain lions on your operation?

- Not Concerned
- Somewhat Concerned
- Very Concerned

22. How concerned are you about depredation by jaguars on your operation?

- Not Concerned
- Somewhat Concerned
- Very Concerned

23a. Over the last 10 years, how many animals have you lost to depredation by mountain lions?

Number: \_\_\_\_\_

23b. Over the last 10 years, how many animals have you lost to depredation by jaguars?

Number: \_\_\_\_\_

24. What management practices have you implemented in response to depredation by mountain lions or jaguars? Write "none" if applicable.

Management Practices: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

25. What effect do you think designation of critical habitat for jaguar will have on depredation on your ranch?

- Large increase
- Small increase
- No impact
- Small decrease
- Large decrease

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

26. What types of assistance to reduce the impacts of depredation would you be interested in? Please mark all that apply:

- Workshops about depredation management
- Pamphlets/reports about depredation management

- Advice from University Extension agents
- Advice from fellow ranchers
- Technical assistance from Extension agents
- Technical assistance from NRCDs
- Technical assistance from NRCS
- Cost-share funding for management from NRCS
- Non-Federal funding assistance for management
- Compensation fund to pay for cattle losses
- Other: \_\_\_\_\_
- Other: \_\_\_\_\_

27. Would assistance with depredation issues change your interest in participating in a conservation incentive program that benefits jaguar habitat?

1	2	3	4	5
Much Less Interested	Somewhat Less Interested	No effect	Somewhat More Interested	Much More Interested

## Section Six: Demographic Info (optional)

28. How old are you?

- Younger than 20
- 20-29
- 30-39
- 40-49
- 50-59
- 60 or Older

29. How long have you been managing your current operation?

- Less than 1 year
- 1-9 years
- 10-20 years
- 21-40 years
- 41-60 years
- Over 60 years

30. How long has your family been ranching?

- Less than 1 year
- 1-9 years
- 10-24 years
- 25-49 years
- 50-75 years
- Over 75 years

30. On average, how large is your operation?

- Less than 50 head of cattle
- 50-100 head of cattle
- 101-300 head of cattle
- 301-500 head of cattle
- More than 500 head of cattle

31. On average, what portion of household income typically comes from your ranching activities in a given year?

- Less than 10%
- 10-49%
- 50-75%
- 76-100%

To ensure the anonymity of responses, we ask that you do not write your name or address on this survey.

We do, however, ask that you create an anonymous identity code that only you will know. Please write your code in the blank spaces below. This code will allow us to track and analyze the results of this survey without associating responses with personally identifiable information. Again, we will never associate your responses with your name, address, or other identifying information. Only you will know your anonymous identity code. If you would prefer not to create a code, please skip this step. Even if you do not create an identity code your opinions are essential to the success of our research.

To create your code, please list the ***first two letters of your mother's or guardian's first name*** (e.g., Mary becomes MA) ***followed by the day of the month you were born*** (e.g., if you were born on June 3, your number is 03). For this example, the ID code is MA03. Please print your identity code:

**PLEASE PRINT YOUR ID CODE HERE:** \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_

In the future, we may conduct other surveys and will ask you to use this code so we can track your responses over time without the use and retention of any personally identifiable information. We are committed to protecting your privacy. Responding to this survey, and creating an anonymous identity code, does not commit you to respond to a future survey.