Thompson J., Paviolo A., Morato R. G., Jedrzejewski W., Tortato F., de Bustos S., … & Breitenmoser Ch. 2023. Jaguar conservation status in north-western South America. CatNews Special Issue 16, 35–43. Supporting Online Material.

Questionnaire on the status
of the species XY

Introduction: This Questionnaire aims to compile information on the conservation status of the Species XY **per range country**. The information provided will also serve for the next assessment of the IUCN Red List of the Species XY (see project description) and will be compiled by regions (region1, region2, region3, region..). The categories used in this Questionnaire are therefore following the IUCN Red List assessment procedures. The goal of the exercise is to compile and review the **presently available information** and to identify important gaps in our knowledge, in order to raise awareness for the Species XY and advance its research and conservation.

Instructions:

- Please provide the most recent information and figures
- Please state for all answers the corresponding reference(s) and provide a full reference list at the end
- Please write "unknown" for questions which cannot be answered
- The standardised time frame to describe changes is 10 years (~ 3 generations by IUCN standards)

Country/State/Region (data below relates to):

Compiler/s:

Contact details:

Date:

1. Distribution and Habitat

1.1. Please attach a map of the current Species XY distribution range in the country/region (in a word file or as jpg) and provide, if possible, the data of the map in the attached spread sheet. Alternatively, you can provide us the data and we produce the map for you. Please categorise point distribution data according to the SCALP criteria:

C1	"hard facts", verified and unchallenged observations such as pictures, captured or dead animals or genetic proofs
C2	Observations controlled and confirmed by an expert or trained person such as verified reports, livestock kills, tracks or scats
C3	Unconfirmed observations, which cannot be verified such as sight observations or not verified kills, tracks or scats

If you also or only have GIS data such as polygon layers with distribution information, please, if possible, provide us these layers and also include this information in the spread sheet. Please indicate for each polygon in which ones the Species XY is

Extant	The species is known or thought very likely to occur presently in the area, usually encompassing current or recent localities where suitable habitat remains.
Possibly extant	The species may possibly occur, based on the distribution of suitable habitat, but where there are no known records. This range often extends beyond areas where the species is extant.
Possibly extinct	The species was formerly known or thought very likely to occur in the area, but it is most likely now extirpated from the area because habitat loss/other threats are thought likely to have extirpated the species and/or owing to a lack of records in the last 30 years.
Extinct	The species was formerly known or thought very likely to occur in the area, but there have been no records in the last 30 years and it is almost certain that the species no longer occurs, and/or habitat loss/other threats have almost certainly extirpated the species.

Presence uncertain   The species was formerly known or thought very likely to occur in the area but it is no longer known whether it still occurs (usually because there have been no recent surveys).

1.2. What is the trend of the distribution range (change in past 10 years) in your country/region?

Total range (development of total area occupied):

Strong decrease   ☐
Decrease   ☐
Stable   ☐
Increase   ☐
Strong increase   ☐
Unknown   ☐

Fragmentation (splitting of the distribution range; decrease = positive trend!):

Strong decrease   ☐
Decrease   ☐
Stable   ☐
Increase   ☐
Strong increase   ☐
Unknown   ☐

Reference

☐

1.2.1 What are the major reasons for change in the distribution range of the Species XY?

☐

1.3. Please give a short description of the Species XY range and any other important information in regard of its distribution in your country/region.

☐

1.3.1. State the upper and lower elevation limits of its occurrence:

Upper elevation limit (meters above sea level)   ☐
Lower elevation limit (meters above sea level)   ☐

Comments

☐

2. Habitat and Ecology

2.1. Please give a short description in which habitats the Species XY is found and which are important habitat requirements for the species.

☐

2.2. Please provide any home range estimate for the Species XY in your country/region.

Home range size (km²)	Sex of studied animals (m = male, f = female)	Nbr. of animals studied	Region name	Study area size (km²)	Method used	Year	Reference

2.2.1. Please provide information on the percentage of overlap between home ranges of Species XYs.

☐

2.3. Please indicate the main activity period of the Species XY.

Nocturnal ☐
Crepuscular ☐
Diurnal ☐
Unknown ☐

2.3.1. Please provide a short description of the activity patterns of Species XYs in your country/region.

☐

2.4. What are the main prey species of the Species XY in your country/region?

☐

2.5. Please provide any important information on the behaviour of the Species XY.

☐

3. Population size and abundance information

3.1. Is a systematic monitoring scheme in place?

Yes ☐
No ☐
Unknown ☐

3.1.1. If yes, please provide a short description of the monitoring (methods, where, when, how often etc.).

☐

Reference

☐

If you use a standardised protocol please attach a copy of it.

3.2. What is the Species XY's current population trend (change of abundance in your country/region in past 10 years)?

Strong decrease ☐
Decrease ☐
Stable ☐
Increase ☐
Strong increase ☐
Unknown ☐

Reference

☐

3.3. Please provide concrete Species XY population size estimates for your country/region, if available. Provide the most recent figures with year of estimation and reference. If both, official estimations and diverging scientific/expert estimates are available for a region or the country, please provide both.

Population size	Mature individuals only? (Yes/No)	Region name and size (km²)	Reference area (km²)	Method used	Year	Reference

Comments

☐

3.3.1. Who does the population size estimations?

Governmental agencies	☐
Academic/research centre	☐
NGOs	☐
Independent individuals	☐
Other (please specify):	☐

3.4. Is the Species XY population in your country/region fragmented?

Yes
No
Unknown

Reference

Reference

3.5. Are there any subpopulations of the Species XY identified?

Yes
No
Unknown

Reference

3.4.1. If yes, how many are there?

3.6. Are there any numbers or any information on the mortality of Species XYs in your country/region and is there any information on the types of mortality causes (if so please list them here)?

3.6.1. Please provide specific information on disease if available.

3.7. Please state the Species XY density estimations if available.

Density (Species XYs per 100 km²)	Region/area name	Region/Area size (km²)	Pop. Size	Method used	Year/ Date	Reference

Comments

4. Legal status, utilisation and management

4.1. Is there a formal management plan or a conservation (action) plan for Species XYs in your country/region?

Yes
No
Unknown

Reference

If yes please provide a pdf copy of it.

Comments

4.2. Which is the formal ministry/department responsible for the management/conservation of the Species XY if available?

Reference

4.3. If available, how is the management organised? Are there different management/conservation systems in different regions/areas?

Reference

4.4. What is the legal status of the Species XY in your country/region and in different regions/provinces?

Reference

4.5. What is the Red List status of the Species XY in your country/region?

Reference

4.6. Is the Species XY subject to harvest, hunting or culling?

Yes

No

Unknown

Reference

4.6.1. If yes, how many Species XYs are harvested/hunted/culled per year?

4.6.2. If yes, what is the trend of the harvest/hunting/culling?

Strong decrease

Decrease

Stable

Increase

Strong increase

Unknown

Reference

4.6.3. If yes, what are the reasons for its harvest/hunting?

Comments

4.7. Is the Species XY or parts of the cat (e.g. skins) subject to trade?

Yes

No

Unknown [ ]

Reference

[   ]

4.7.1. If yes, how many Species XYs or parts are traded per year?

Species XYs	Total numbers	Purpose
Live animals		
Dead animals		
skins		
skulls		
Others (please specify):		

4.7.2. If yes, what is the trend of the trade?

Strong decrease [ ]
Decrease [ ]
Stable [ ]
Increase [ ]
Strong increase [ ]
Unknown [ ]

Reference

[   ]

4.7.3. If yes is the trade local, national and/or international?

Local [ ]
National [ ]
International [ ]
Unknown [ ]

Reference

[   ]

4.7.4. If yes, what is the end use of the species?

[   ]

Reference

[   ]

4.8. Please provide additional important information on the use and trade of the Species XY in your country/region.

[   ]

4.9. Are important prey species of the Species XY hunted?

Yes [ ]
No [ ]
Unknown [ ]

4.9.1. If yes, which prey species, by whom, why, how, since when and where?

Prey species	Who hunts	Reason for hunting	Hunting methods	How often	Since when	Where

4.9.2. If yes, what is the trend of the hunting of prey species?

Strong decrease [ ]
Decrease [ ]
Stable [ ]

Increase		
Strong increase		
Unknown		

Comments

4.10. Are important prey species of the Species XY controlled as pest animals?

Yes	
No	
Unknown	

4.10.1.If yes, which species, by whom, how, since when and where?

Prey species	Who controls	Control methods	How often	Since when	Where

4.10.2. If yes, what is the trend of the control of prey species as pest animals?

Strong decrease	
Decrease	
Stable	
Increase	
Strong increase	
Unknown	

Comments

5.   Threats

5.1. Please list threats to the Species XY in your country/region. Please rate the threats according to their importance in regard to negatively affecting the survival of the Species XY (1 = very important, 2 = important 3 = not important, ? = unknown), indicate the timing of the threat (1 = past, unlikely to return 2 = past, likely to return, 3 = ongoing/present, 4 = future) and the range it affects (1 = local, 2 = regional, 3 = national, 4 = range wide).

Threats to survival	Importance	Timing	Range	Comments
1. Persecution (illegal killing, poaching)				
2. Harvest/Hunting				
2.1. Fur				
2.2. Medicine				
2.3. Cultural/scientific/leisure activities				
2.4. Others (please specify)				
3. Habitat loss and fragmentation				
3.1. Agriculture				
3.2. Livestock farming				
3.3. Infrastructure development (transport, human settlements, industry, dams, tourism)				
3.4. Forestry/logging				
3.5. Resource extraction (mining, oil & gas drilling)				
3.6. Other (please specify)				

Threats to survival	Importance	Timing	Range	Comments
3.7. Unknown				
4. **Accidental mortality** (trapping/snaring, shooting, poisoning, vehicle collision, guard dogs)				
5. **Disease**				
6. **Lack of public acceptance for species presence**				
6.1. Low acceptance due to conflict with hunters				
6.2. Low acceptance due to conflict with livestock				
6.3. Low acceptance due to other causes (please specify)				
7. **Lack of knowledge**				
8. **Poor management structures** (poor enforcement, lack of capacity, fragmentation of management authority etc.)				
9. **Change in native fauna** (prey/food base, competitors, pathogens/parasites)				
10. **Intrinsic factors** (limited dispersal, low densities, inbreeding, poor reproduction, restricted range etc.)				
11. **Human disturbance** (recreation/tourism, research, transport)				
12. **Climate change**				
13. **Other** (please specify)				

5.2.   Please list the three major threats to the species in your country today and provide a short comment for each threat explaining its reason and impact.

	Threat	Comments
1.		
2.		
3.		

5.2.1. Are the causes of these major threats known?

Threat 1   Yes   ☐   Threat 2   Yes   ☐   Threat 3   Yes   ☐
            No   ☐   No   ☐   No   ☐
            Unknown ☐   Unknown ☐   Unknown ☐

5.2.2. If yes, which are they?

Threat 1
Threat 2
Threat 3

Reference

5.2.3. Are these major threats addressed by conservation actions?

Threat 1   Yes   ☐   Threat 2   Yes   ☐   Threat 3   Yes   ☐
            No   ☐   No   ☐   No   ☐
            Unknown ☐   Unknown ☐   Unknown ☐

5.2.4. If yes, by which ones? Are they effective?

Threat 1

Threat 2	
Threat 3	

5.3. Please provide a short comment on how threats are affecting the Species XYs in your country/region by providing more detail on their possible origin, possible future development, and what their possible effects on the species are, were in the past 10 years, and will be in the future 10 years.

6.   Conservation Measures

6.1. If a conservation action plan for the Species XY exists in your country/region, who is responsible for its development and implementation and how often is it updated?

Reference

Comments

If yes please attach a pdf version of the conservation action plan.

6.2. Which are the suggested or implemented priority conservation actions/measures to conserve the Species XY?

1.
2.
3.
4.
5.

6.3. Specific research or conservation projects/programmes on Species XYs in the past ~10 years.

Project and short description	Duration	Comments

6.4. In which protected areas do Species XYs occur in your country/region?

PA name	Area size (km²)	IUCN category	Nbr. of Species XYs	Reference

Comments

6.5. Please provide additional important information on the conservation of the Species XY in your country/region.

7. Any other comments?

Full Reference List

Thank you very much for your help and cooperation!