

Dear Earthwatch volunteer,

Our first year with Earthwatch has finished. We spent many days working and investigating together and it has been an extraordinary experience. We remember each one of our volunteers, because every one of you left us a unique lesson.

We worked together trying to understand cat ecological requirements, regardless of our age or nationality. And we achieved it under all kinds of climate conditions, during the day and at night, in the company of sun and rain.

The Earthwatch Institute gave us a unique chance to get financial support. However, there is something more that we always keep with us - our memories with each volunteer.

You chose to spend your vacations here, helping us, and this is not a common decision to take. We thank you for that! As a reward, we offered you all the difficulties of field work, but we also did our best to offer our experience, company, and - not least important - the taste of our "*mate*"!

We walked for hours looking for carnivore signs, and we shared lunchtime under the sky, surrounded by cows, horses, trees and also wildcats (we couldn't see them, of course, but they were with us all the time). How can we forget the excitement of a trapping and the disappointment of many unsuccessful trap checks.

Our team, the *GEEM*, has always been formed by *amigos* (friends). And now we know that we have a lot of new friends all over the world.

We thank you one more time for deciding to support our cats, and for all the moments that you shared with us - for trying to learn from us and for teaching us some of your life experiences.

We know that some day we will meet again.

Dr. Mauro Lucherini, Dra. Claudia Manfredi and Mgs. Estela Luengos Vidal

EARTHWATCH INSTITUTE FIELD REPORT 2006

Project Title: Argentina's Mysterious Cats

Principal Investigator: Dr Mauro Lucherini

Position/Affiliations: Mammal Behavioural Ecology Group - (GECM) - Universidad Nacional del Sur

Research Site: Laguna Chasicó Provincial Park (LCP), Buenos Aires Province, Argentina. The park is located in the southwest of Buenos Aires (38°42'S and 62°56'W).

Local Management Status of the Research Site: We work in the proximity of the Laguna de Chasicó Provincial Park and in collaboration with its staff, but we are based at a private farm, called "Los Alamos", owned by Alberto Salvá.

Scientific names of primary species being studied: We decided to develop a research project in Argentina in a site where the occurrence of three small cat species, pampas cat, (*Oncifelis colocolo*, Jaguarundi, *Herpailurus yaguarundi*), and Geoffroy's cat (*Oncifelis geoffroyi*), and one big cat, the puma, (*Puma concolor*), had been reported.

Key Research Objectives

The project goal is to contribute to the conservation of a unique guild of neotropical cats living in a human-modified ecosystem. We aim to understand how four cat species segregate their niches and how habitat alterations caused by humans may affect cat behaviour and guild structure.

This first year's objectives were:

- To develop a map of the habitats occurring in the study site
- To confirm the presence and attempt an estimate of the relative population abundance of the four cat species in comparison to other carnivores through the use of camera trapping.
- To live trap, radio tag and radio track a sample of individuals of one or more of this cat species and study the size and overlap of individual home ranges, habitat use and activity patterns.
- To analyse the capture efficiency for each model of traps and kind of bait.

Data Collection and Results

Sign counts

Sign (faeces, urine marks, tracks, skulls/skeletons, sightings) counts have proven to be a very useful and efficient method to carry out surveys over vast geographic areas (Smallwood and Schonewald 1998); they are also frequently used to provide relative estimates of abundance (Stephens *et al.*, 2006). For this reason we have searched for direct and indirect sign of presence. We defined "**scent marking sites**" all sites with faeces and/or urine, and "**latrine**" a site where more than two faeces clearly deposited in different moments were found. To avoid overestimating the abundance of the species that tend to defecate in latrines, each latrine was recorded as one sign of presence (or carnivore site).

To clearly relate search effort and encounter rates, sign counts were mainly conducted along transects. Transects were walked by three researchers (one PI and two Earthwatch

volunteers) simultaneously, who searched a 10 metre-wide band of ground. The location of all carnivore signs of presence was recorded through a GPS receiver and the habitat in its surroundings (a 10 metre-radius circle) was described. Along these transects we also recorded information on habitat characteristics and availability of trees that can be used by wildcats as scent-marking sites. Based on preliminary field surveys of the area, we classified habitats within the following types:

Woodland: where tree vegetation is dense and abundant, like algarrobo *Prosopis alba* and *P. nigra*, chañar, *Geoffrea decorticans*, and a lot of the shrub is also present.

Grasslands: areas dominated by grasses.

Sand dunes: areas with sandy soil forming small dunes where trees are completely absent and where vegetation is almost exclusively composed by a small shrub *Aextoxicon punctatum*.

Farm or cattle pasture: areas with high human impact surrounding houses or without natural vegetation, only cattle pasture.

During 2006, we completed six lines with an average (\pm Standard Deviation) mean length of 5.641 ± 1.613 km (range: 4.250-8.580 km). 32.2% of the carnivore evidence was registered along line transects, while 67,8% was found when searching opportunistically while walking through the study area.

Sign search enabled us to register 171 evidences of wild carnivores. 81.3% of them were indirect (faeces on the ground or on trees), while only 18.7% were direct signs of presence (sightings and skulls or bodies; Fig. 1). The percentage of the different types of sign varied between carnivores. 65.5% were of undetermined wildcats, 19.3% of pampas foxes, *Pseudalopex gymnocercus*, 6.4% of mustelids (grisons, *Galictis cuja* and skunks, *Conepatus chinga*; Fig. 2). Puma presence was recorded only once.

We have totalled five Geoffroy's cat sightings, in different moments of the day and mainly associated to the woodland habitat, three of pampas cats, one at night and the other in the day, associated with the woodland and dune habitats, four of foxes, three of skunks and five of lesser grisons.

Fig. 1. Proportions of different signs of presence.

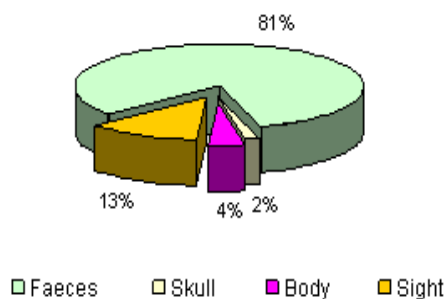
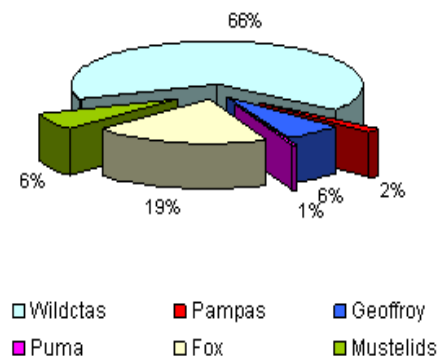


Fig. 2. Proportions of signs of presence attributed to different carnivores.



Habitat composition around finding sites

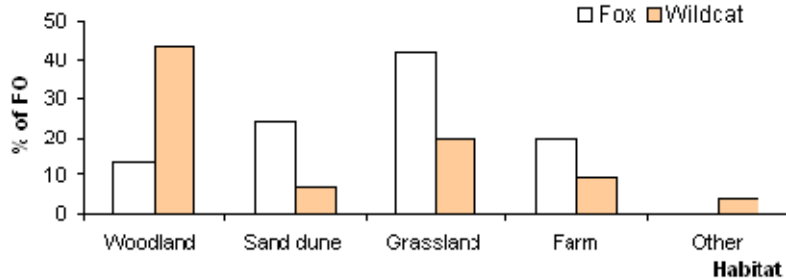
We analysed the distribution of sign with respect to habitats as percent frequency of occurrence (number of occurrence for each habitat in finding sites/total number of occurrences of habitat x 100; Scott 1941). We estimated habitat use diversity using the Levins Index ($B = 1/\sum p_y^2$ where P_y is the relative proportion of the habitat y ; Levins, 1968). In this study, the values of this index can range between one (minimum habitat use diversity, when only one habitat is used) and six (maximum diversity, when the six habitats are uniformly used).

Woodland (43.9%) and grassland (20%) were the main habitat in the proximity of wildcat sign, whereas pampas foxes used woodland infrequently, since where its signs were

found grassland (31.1%), sand dunes (24.4%) and barren ground (20%; Fig. 3) were the main habitats.

Foxes showed a more varied habitat use than wildcats but the differences in the Levins Index (1968) was small (foxes: $B=4.4$ and wildcats: $B=3.7$).

Fig 3. Percentage of carnivore sign in different kinds of habitat.



Scent marking sites



Wildcat's Latrine on tree.

Even solitary animals must have effective communications systems to maintain their organisation social and ensure reproductive success (Begg *et al.*, 2003). Scent marking is the application by an animal of faeces and urine that contain gland secretions with information about the reproductive and hierarchical status of the owner (Macdonald, 1980).

Fig. 4. Proportions of different kinds of wildcats scent marking sites.

57.7% of cat marking sites were found on trees (with an average of 3.2 ± 2.5 faeces), 62.5% of those were classified as latrines, and 42.3% on the ground (average number of faeces: 1.6 ± 3.5 ; latrines were 19% of these sites; Fig. 4).

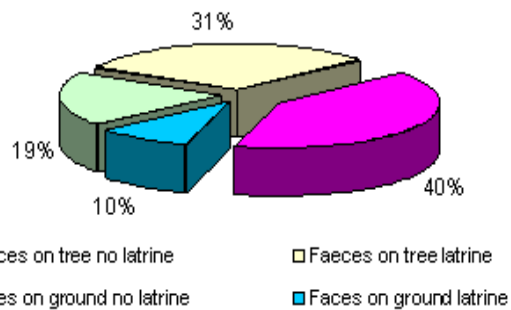
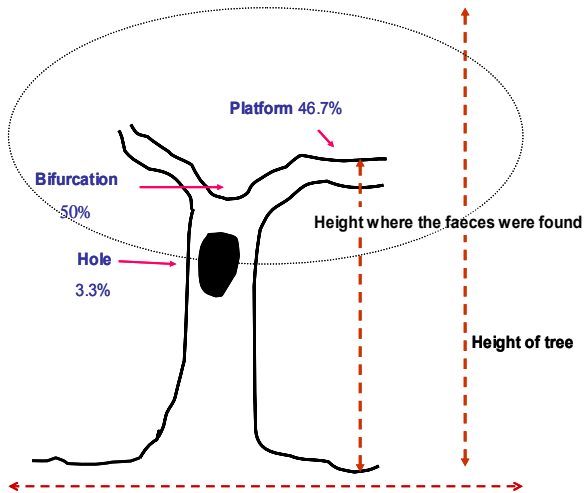


Fig. 5. Measures taken to the trees used as scent marking sites and proportion of location where sign were found.



■ Faeces on tree no latrine ■ Faeces on tree latrine
■ Faces on ground no latrine ■ Faces on ground latrine

Faeces were found on adult Caldén trees mainly located in close woodland (80.4% and open woodland 19.6 %), which had an average height of 6.9 ± 1.9 m and a diameter of canopy of 14 ± 4.1 m.

50% of faeces were located in the bifurcation of the branches and the 46.7% on platforms on branches (Fig. 5).

On average the tree with faeces had a height of 6.9 ± 1.9 m and a height where the faeces were of 1.8 ± 1.1 m (Appendix 1, Table A).

Nocturnal carnivore transect

Nocturnal carnivore counts by truck have been implemented to improve our ability to obtain carnivore population abundance estimates and identifying their habitat use. They were driven at constant speed (15 km/h) during the first part of the night and using a one million-candles spotlight. A total of nine nocturnal transects were realized. In five of them we didn't see any carnivores, only hares, and in the other four, we sighted four Geoffroy's cats, eight skunks and one fox.

Collection of cat specimens struck by car

With the collaboration of the park rangers, especially Fabricio Piantanida and Anibal Areco, we have collected specimens of wildcats killed by cars along the different routes of the region, which we are using to develop a database on the present-time distribution of these species and characterise the habitat where they occur. In the laboratory, we have made necropsies to obtain skulls and skins and other samples for morphological and/or genetic studies, stomach content for diet studies and external and internal parasites. In the past six months, we have already collected 11 specimens, 4 pampas cats and seven Geoffroy's cats.

Capture and radiocollaring of wildcats

The protocol that we employ has been used to capture carnivore species for eight years for *GECM* (Luengos Vidal, 2003). Both box and leg-hog traps were used to capture cats. Traps were checked every six hours to produce less stress in the animal. Trapped cats were injected with a mixture of ketamine hydrochloride (HCl) and xylazine. Data collected on captured animals included sex, estimated age, body mass and standard morphological measurements. Wildcats were ear tagged, a skin plug was collected from the ear, and the adult animals were fitted with a collar. Non-target species were also trapped during the course of trapping, like pampas foxes, skunks, armadillos and opossums.

With the help of Earthwatch teams we trapped eight Geoffroy's cat individuals, one fox and one skunk (Appendix 1, Table B).

Trapping effort was over 655 trap nights (TN: number of active traps x number of days of the active traps) during 30 different days of trapping (Table 1).

We calculated the trap effort (TN) and the trapping efficiency (TE: TN/ number of animals trapped). We set in the field box traps with leg-hog traps around them or in a group tied to branches. We used dead bait (entrails of chicken or fish) or live bait (chicken) in a protected section of box traps.

Table 2 shows the trapping efficiency with the different trap models and types of bait. Leg-hog traps around box traps with live bait had the highest trapping efficiency (9.4 trap days per capture).



Earthwatch volunteers working in a Geoffroy's cat capture together with the staff.

Table 1. Summary of results of trapping with Earthwatch teams.

Number of the Team	I	II	III	IV	V	Total
Days of Trapping	4	5	4	8	9	30
Effort (trap nights)	85	132	74	190	174	655
Geoffroy's cat captured				4	4 + 2 recaptures	10
Other carnivores captured			2	1		3
Other animals caught		2	1			3

Table 2. Trapping efficiency with different live traps.

Kind of the trap	Box traps with dead bait	Leg-holds around box traps with dead bait	Box traps with live bait	Leg-holds around box traps with live bait	Group of leg-holds
Trapping efficiency	237	252	0	9.4	0

Radiotracking of wildcats

A social system had been defined as the manner in which individuals position themselves in the space and time in relation to other conspecifics and some recourses of the environment (Morrison and Menzel, 1972). The social systems can act as a natural regulation mechanism, limiting the proportion of the population reproducing, therefore the rate at which the population can increase (Beier, 1993).

We obtained an average of 51.8 locations per cat in only three months of radiotracking (SE: 15.2; range: 26–65, Table 4). Following the loss of the signal of three individuals (F1, F2 and M3), we made an intensive search by truck and by airplane to find out if the animals had moved to other places (dispersed) or if the loss was due to radiocollar failure. During the flight we heard M3's signal at a distance of 10 km from the trapping area. After the flight we made three attempts to find the M3 by truck but with no success.

We performed home range analysis with the RANGES V (Kenward and Hodder, 1999) software. We calculated the traditional minimum convex polygon method (MCP) using 100% of the locations (Mohr, 1947), and the area defined by MCP excluding the most external 10% of the locations (outliers, 90% MCP), as suggested by Powell (2000).

The preliminary mean home range sizes ranged from 0.97 km² (90% MCP) to 1.53 km² (100% MCP). Male home ranges were larger (with the exception of M3) than female ranges (Table 3 and Fig. 6). The M3 had smaller home range and the two females had similar home range size.

Table 3. Of home range size of radiocollared Geoffroy's cat at "Los Alamos" farm.

In: Individual. $\bar{X} \pm \sigma$: average \pm Standard Deviation.

In	Frequency of collars	Number of fixes	Signal loss	MPC 100% km ²	MPC 90% km ²
F1	214	26	25 October	1,14	0,71
M1	1309	65	-	3,66	2,56
M2	43	60	-	1,30	0,57
M3	103	55	27 November	0,45	0,27
F2	62	53	17 December	1,09	0,73
$\bar{X} \pm \sigma$	-	51,8 \pm 15,6	-	1,5 \pm 1,2	0,9 \pm 0,9

Fig. 5. Home ranges of Geoffroy's cats in "Los Alamos" farm.
M: Male. F: Female.



Camera trapping

We employed 13 camera traps distributed in the three line transects. With the first and second Earthwatch teams we put them in the woodland areas, for a period of 17 to 19 days; while with teams 3 and 4 we set them in sand dunes habitat for 27 days. Spacing between them was approximately 1 km and the cameras were active continuously (24 hours per day). They were checked every three days and films or batteries were replaced if necessary. To increase capture probability, this technique was coupled to scent-stations (Roughton and Sweeny 1982), which means that we used an odorous bait to attract carnivore to the camera stations.



Miram setting a camera trap.

As scent baits, we utilised bobcat urine (BU) and bobcat gland lure (BGL). Camtrakker®, Stealthcam® and Buckshot® camera traps were used. All photo trap models had passive infrared detection systems. Sensors detected movements or changes in temperature from the presence of an animal, and activate the camera trigger.

We calculated trapping effort as the number of camera traps x number of days that they were active. Capture rate (number of photographic captures during the survey / trapping effort) was used as abundance index (Jackson *et al.* 2005). Cameras were placed in 26 different sites. Total sampling effort was 590 total trap days, with 239 traps days in woodland and 351 in sand dunes habitat.

Most (42%) of the 47 carnivore photo captures we obtained belonged to skunks followed by Geoffroy's cat (36%, Fig. 6), where, for this species, the majority of the photos were taken in woodland (94%, Fig. 7) areas and with similar proportions with the two different scent baits (Fig. 8).

Skunks and Geoffroy's cats were more abundant than the other carnivore species, and the pampas cat appeared to be the rarest.



Geoffroy's cat and pampas cat pictures taken with camera traps at "Los Alamos" farm.

(Fig. 9). Puma and grisons were not detected using this technique.

Fig. 6. Proportions of camera trap photos of different carnivore species.

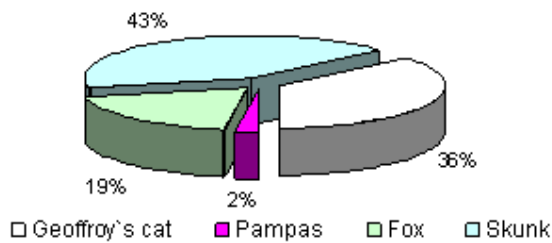


Fig. 7. Use of habitat by carnivores based on camera trapping data.

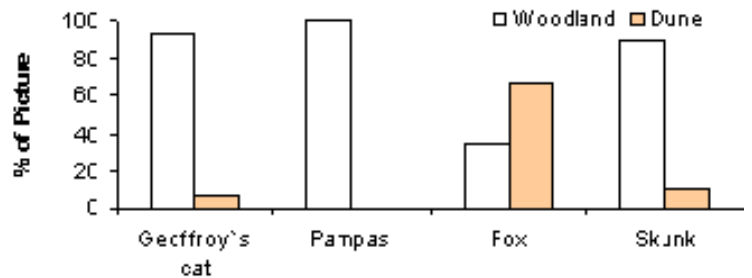


Fig. 8. Proportions of photos of wildcats taken with different bait.

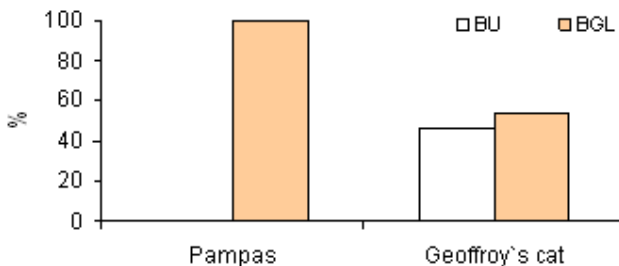
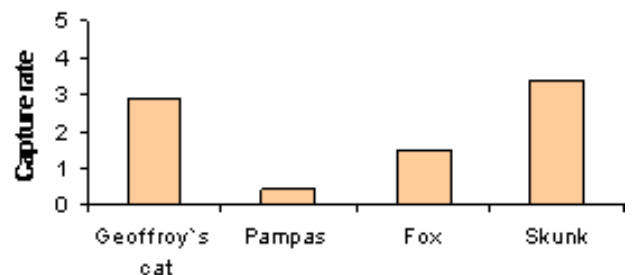


Fig. 9. Carnivore camera trap capture rates (photos / trapping effort).



Conclusions

Through the different methodologies used, to date we have confirmed the presence of three of the four species of wildcats in the area we surveyed, where the Geoffroy's cat was the most abundant wildcat and pampas cats and pumas were very rare. This result probably reflects different population numbers. It is still difficult to explain the reasons for these variations, but it is likely that the puma's low abundance is related to intense hunting by humans. To detect perceptions of and attitudes towards carnivores by local people, we have already started interviewing farmers in the study area.

The maximum capture efficiency of leg holds with live bait would be related to the predatory behaviour of the Geoffroy's cat, which mainly feeds on live prey. We think that perhaps it is necessary to modify the capture protocol or use a different type of bait for pampas cat, because we had sighted individuals of this species in the areas where we set our traps but never trapped one.

In general, the small wildcat species have been mainly found in the closest habitat. Our hypothesis is that these habitats can offer them the vegetal cover for trophic resources they need. Evidence of Geoffroy's cat was associated mainly with woodland, while signs of pampas cats were related to dune zones and the open woodland patches. This suggests that maybe these two species are adopting a differential use of the habitat as a mechanism of niche separation, but we need to obtain more information about this important point before drawing conclusions.

We can confirm that in the Argentinean woodland, wildcats use scent marking sites similarly to what was reported in previous research for the Geoffroy's cat (Johnson and Franklin, 1991; Vuillermoz and Sapoznikow, 1998; Manfredi, 2006); this behaviour is associated with the territorial defence and communication between individuals (Macdonald, 1980, Robinson and Delibes, 1988). Faeces were mainly found on adult Caldén trees located in patches of woodland affected by some logging. It can be hypothesized that selecting logging of the woodland may produce a border effect, and create a habitat with a mix of woodland and grassland with a higher availability of prey species and suitable hunting areas (Nowell and Jackson, 1996).

The wildcats are located in the top of the trophic pyramid and, in relation to their body size, they need comparatively large home ranges. Therefore, understanding their ecological requirements and their relationship with biotic and abiotic factors of their habitats will enable us to provide information for management and conservation strategies for these species that will ultimately favour the sustainable use of the natural resources in the Argentine woodland ecoregion, where cattle and agricultural activities are having an increasing alteration effect.

Significance/Benefits of Research

Locally: The importance of the project at the local level is the conservation of biodiversity and natural wildlife where cattle activities are carried out. Most local people do not know the importance of the carnivores in natural habitats and they have a negative attitude and actively hunt carnivores because they think that they cause great damage to their activities. Therefore, the project is trying to understand the requirements of these species and, at the same time, to change the perception and attitude of local people. The park authorities are working in a management plan of the protected area and its surroundings. We are cooperating with them, other researchers and local people, contributing with information on wildlife and especially on the effect of human activities.

Nationally: The presentation of our results in national conferences/journals has already started and will improve the understanding of ecological and conservation requirements of these felid species. Furthermore, our project is providing opportunities for university students from Argentina (and other countries) to volunteer and thus get training on a variety of field techniques in carnivore conservation biology. The biology student Miriam Benzaquin is developing her final work to obtain her titles in Lic. en biodiversidad.

Internationally: As we have been doing in previous years, we will provide continuous inputs to partners and institutions involved in wildlife conservation, through the PIs' contacts, who are members of the Cat Specialist Group and the South American Cat Conservation Alliance. The data collected by this project are expected to supply important information to the elaboration of a new version of the global Action Plan for Cat Conservation and the regional revision of cat conservation status. We expect that preliminary data will soon be sent to an international journal. I expect to be able to publish at least two-three papers in international peer-reviewed journals (e.g. J. Mammalogy, Oryx, Animal Conservation and Conservation Biology).

Dissemination of Results

Management plan

We are participating in the management plan of the Laguna de Chasicó protected area and the surrounding areas. The first workshop was carried out on 17th October 2006 in the Chapalcó village, Buenos Aires province. The government authorities have invited different stakeholders: national, provincial and regional organisations, local people and researchers. Our staff was invited to participate in this process, and specifically in the fauna section, to study which are the spatial, habitat and nutritional requirements of carnivore species and thus establish their survival needs and detect areas of protection value in Chasicó area.

Reports

Our Annual report of activities has already been submitted to Laguna de Chasicó Park authorities and the provincial government agency in charge of wildlife management for the period from July to December 2006. 8 pages.

The first six month report has been provided to Wildlife Conservation Society - Kaplan Awards for wild cat conservation, for the period May - November 2006. 18 pages.

Conference presentations

Progress in investigation and conservation of this project has been presented in the workshop "Recent advances in the comprehension of the small wildcats ecology" (Carnivore Round Table) held in the frame of the I South American Mammal Congress (Congreso de Mastozoología de Sud-América, 5th October of 2006, Gramado-RS, Brazil), where the PI Claudia Manfredi was invited to participate by the organising committee with the paper "Ecological aspect the wildcats in the grassland areas" (Appendix). This conference was attended by over 1,000 participants, mainly professional researchers, conservationists and biology students.

The first results on cat habitat use produced by this project will be presented at the Wild Felid Biology and Conservation Conference (17th to 21st September 2007, Oxford University, UK). Our oral presentation "Habitat use and selection of Geoffroy's cats (*Oncifelis geoffroyi*) in three areas of central Argentina" was accepted (Appendix 1). This is the first wildcat international conference and a very large audience is expected.

Diffusion Activities

To date, diffusion activities have been concentrated in a space provided by the conservation NGO Huellas on its website (www.huellas.org.ar). This space is used with the purpose of spreading our research and conservation aims and, through a wildcat's adoption plan, to reach schools and offer them education activities with their students.

We have also recently produced a project brochure, which we are offering to local people we get in contact with, to provide them with information about our project and the small cats conservation needs (Appendix 1).

Popular articles

We are writing an article for the Argentine wildlife magazine: Ecológica, Naturaleza, Conservación y Sociedad to reach a wider public with details on our project and raise awareness on the conservation issues of wildcats in Argentina, as well as on the use the photo trapping as a technique to study presence/absence and estimate population abundance of elusive species.

Volunteer Tasks and Accomplishments

In our first year the number of Earthwatch volunteers (26) joining our expeditions was high. This was reflected in the large amount of work carried out in the field, which was very important in this new project which started with the first Earthwatch team.

Carnivore trapping was, by far, the task where volunteer contribution was most important. Under the direct supervision of Estela Luengos Vidal, all volunteers helped us to fix our restraining devices, build new ones, and finally place them in the field. All teams then carried out carnivore trapping for 5-9 consecutive days and checked the traps four times a day under a range of weather conditions (in some cases with no project staff accompanying them). This remarkable effort led to the capture of 11 Geoffroy's cat individuals, two skunks and one pampas fox.

Most of these Geoffroy's cat individuals were radiocollared and thus four teams also carried out telemetry sampling to record their activity patterns, habitat use and ranging behaviour. In particular, it was very useful to complete continuous radiotracking sessions during the first 24 hours following animal radiotagging and in the first subsequent days, because this is the period during which the danger of losing track of radiocollared individuals is the highest.

Other tasks where volunteer contribution was very important were the line transects we carried out to collect data on habitat (necessary to inform our satellite maps), looking for

carnivore evidence and setting the camera traps. Since this task was very demanding and we needed three people in each transect line, it would not have been possible without the help of volunteers. We are happy that we completed a total of six transects.

After setting camera traps, volunteers helped us to check them every three days and change films, batteries, fix cameras, etc. In some cases, volunteers took the initiative and organised teams to go alone to check the camera traps.

It is important to underline that Earthwatch volunteers also contributed to the training of young South American conservationists, through the collection of the database necessary to complete one graduation thesis of Miriam Benzaquin.

Project Development

The results obtained in the first months of field work suggest that the methodologies used to date respond to the objectives proposed, in particular camera trapping, through which we could confirm the sympatric presence of two small species (Geoffroy's cat and pampas cat). Nevertheless, more time (and a larger area) is needed to confirm the presence and abundance the other wildcat species (jaguarondi and puma) by this methodology, possibly due to the low number of cameras (and the small area we can cover with them) and/or low population density.

With respect to live trapping, we have had good capture efficiency with the Geoffroy's cat, although we have not been successful at capturing pampas cats. We think that this can be due to its low population numbers and possibly to the fact that this species is more sensible to the presence of humans and traps in its area. To find a solution to this problem we plan to use different box trap models or bait following the example of some Brazilian colleagues, and leave our box trap open, but not active, in the field for a long period before the capture time.

With the collaboration of the park rangers, especially Fabricio Piantanida and Anibal Areco, we have collected specimens of wildcats killed by cars on different routes in the region which we are using to develop a database on the present-time distribution of these species and characterise the habitat where they occur. In our laboratory, we have made necropsies to obtain skulls and skins and other samples for morphological and/or genetic studies, stomach contents for diet studies and external and internal parasites. In the past six months, we have already collected 11 specimens, four pampas cats and seven Geoffroy's cats.

In the next field season we will work more intensively with camera trapping, because we need to understand the habitat preferences of pampas cats and try to identify the areas where they occur more frequently.

We also need to devote more time to working with local people through interviews to improve our knowledge about perceptions of and attitudes to the carnivore species, what are the more important problems that they have with them, and in particular wildcats.

Educational

Field assistants

The project is offering an opportunity to an undergraduate student, Miriam Benzaquín from Universidad Nacional del Litoral, Santa Fe, Argentina, to realize her graduation thesis and through it get extensive training on a variety of techniques for the study of carnivore conservation biology in the field, as well as in data analysis with different softwares. She has been working with us on the project since last July and for a one-year period.

We have developed a national and international volunteer programme to provide training on techniques for the field study of carnivores. Our first volunteer was Pablo Cuello, graduate biologist from Rio Cuarto University, Cordoba, Argentina. He collaborated for 20 days in September in camera and live trapping, as well as in the tracking of radiocollared animals.

All participants in this training programme are also introduced to the conservation issues underlying our project and to the more general conservation and knowledge status of Argentine carnivores and the causes affecting it.

At the moment we are organising to work together with park rangers and personnel of the reserve to make educational activities in the rural schools and in the Médanos city, close to the reserve, for helping students to understand the ecological role of carnivores in ecosystems and the importance of natural habitat and biodiversity conservation.

Partnerships

Huellas ONG. This institution is endorsing the project and offered us a space on its website to make diffusion on the project and look for volunteers who are interested in participating in the project.

Kaplan Awards for Wildcat Conservation (Wildlife Conservation Society) contributed economic support to the project and favoured the signing of a cooperation agreement with D. Cossios (Université de Montreal) for the genetic identification of small cat fecal samples.

Government agency in charge of provincial protected areas. It gives us the authorisation to work with wildlife in the provincial reserve and in the farms. We expect that this institution will use the information we provide in management and conservation plans.

Park staff are helping us to obtain information about direct observations and to collect bodies of dead wildcat specimens on the roads in the area. We are also working with them on the management plan for the Provincial Park Laguna Chasicó.

Lic. Daniel Cossios. For the identification of the fecal samples by DNA genotyping, we have established an agreement with this colleague from Peru, who is working on his PhD thesis on South American small cats population genetics at Université de Montreal, Canada, and who has also received one of the Kaplan Awards.

Acknowledgements

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