Legal Wildlife Trade

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Legal dealing in wild animals is a topic which is routinely hushed up. If one searches the internet by using common web browsers with the key words „legal wildlife trade", then one gets information page after page about *illegal* business with animals. Google for instance, when starting with "legal wildlife" suggests completing the phrase with: "*illegal*' wildlife trade" In addition adding further key words and even different languages are of little use, if one looks for trustworthy information.

What argues for the wildlife trade at all?

Even conservationists hesitate to discuss problems of the legal wildlife business. Obviously these people fear being put onto a radical level when mentioning critical context and so they repeat over and over the very same profane arguments, e.g. that the native inhabitants of an environment will only safe nature, if at the same time they are allowed to use it and so clearing will be less —that animals will be only collected at well defined places and everything will be done with respect to sustain-

Fig. 1
Scorpion mud turtle, *Kinosternon scorpioides scorpioides*, in the Gran Chaco. A view which may soon become a thing of the past?

ability and therefore no kind of species will ever be endangered. Moreover the illegal animal business will be suppressed and undermined by the legal and of course the most important argument is that it is a lucrative and important source of income for the inhabitants and this is helping to fight poverty.

Surely everyone knows these arguments. But what is it all about it? From a distance it all sounds very rational. But unfortunately wrong assumptions will not turn right by repeating an argument several times.

Does trading wild animals lead to higher protection?

This argument is simply wrong. From the moment an area is protected, it is not legal anymore to collect within this environment and so this cannot be of interest for wildlife traders. Intensively carried out eco-tourism might have such an influence in theory —however "intensive" and "eco-" do not correspond very well—, but business with animals cannot guarantee it either. The only theoretical benefit of protected areas is that the animals accrete well so that they would leave such an area and move into areas of exploitation. However, the wildlife trade is not working with such long term and unsecure plans. In addition, the animal business cannot achieve avoidance of clearing for farming purposes because a possible income of landowners from selling wild animals cannot compete with an income from agriculture.

Does legal business reduce illegal trade?

This argument sounds comprehensible at first. However it is wrong. Already in 2001 an intense study in parrots' business proved that it is different, even that the opposite is the case so that legal and illegal trade can have a positive correlation —in explicit: as soon as the legal business grows, the illegal trade increases accordingly (Wright et al. 2001).

It seems logical if one thinks about how trade routes work. The most simple and ideal case, which is a complete embargo of all wild animals, then mandatorily the illegal business has to become disrupted as well. Over all trade routes the "product animal" would be easily recognizable as being illegal. The same is true for the target country as well and it reduced respectively the demand. If exports are allowed however, it is very easy to add animals from illegal sources. The methods of this are of such a variety as the species are. With respect to chelonians as well as other reptiles and amphibians this is an exasperating topic on the big scale of the breeding farms (Shi et al. 2007, Vinke & Vinke 2009, Nijman & Shepherd 2009, Lyons & Natusch 2011) and similar camouflaging the source with systematic fraudulent labelling through transit countries (Vinke & Vinke 2009, Nijman & Shepherd 2010, 2011). Aside from this, it is logical that the existing trading routes of the legal business could be used synergistically, starting with collectors, having a much larger yield, over to costs for transport in the source country, and ending in the fact that illegal animals are incorporated into legal shipments and so they are incorporated into the very same trading mechanisms.

Fig. 2
The orange-legged monkey tree frog, *Phyllomedusa azurea*, is one of the extremely exploited species with collecting quotes of up to 144 animals per km^2.

What about sustainability

Sustainability is based on the idea that there are sufficient studies

The Marsh deer of Don Cirilo

(…) Once upon a time it started with an oxcart which was on the way to the rancho group coming all the way through the forest from Clorinda. The rancho group was called Hoga pona in Guarani, meaning the beautiful place. (…) The lead of the oxcart was taken by a man with a beautiful moustache, the same one which is worn by for example a lion tamer or other especially handsome and bold men. It was Mr. Tognarelli - an Italian. On the cart there were rude cages and crates (…).

Already a few days ago, Mr. Tognarelli sent horsemen in all kind of directions, which had to say to all men in the fields and forest and on the scattered ranchos next to the cowherds that he came with a huge bag of money in order to by living animals and that he pays knowingly high rates of money. For a Tatu carreta, a giant armadillo, he would be willing to pay not only ten or twenty but even thirty five argentinos just out of extravagance and for a Aguara guazu, a maned wolf, he would pay twenty, for a marsh deer, Guazu pucu. also twenty, however he would of course pay only eight for a red brocket deer, Guazu pita and for a grey Brocket deer. Guazu vira only seven argentinos. Young rheas with straight legs he would pay a fiver for. With parrots there is knowingly no deal possible. Last year he ended up keeping three hundred of them. But in order to stay in business he would like to sell eighty centavos per animal, because he only does this entire business to help the poor ones with some business. In principle he only pays and loses money all the time and is tired of this entire story. This is what the horsemen had to tell everywhere. And the cowherds and other ones had to divide the prices by five and encouraged the Toba Indians, the silly ones, which still believed that two single pesos argentinos would be worth more than a single five peso note.

Mr. Toganrelli established himself in Hoda pona and started a business, which we that don't depend on him, can declare as grotty. Each animal, which was brought to him, was not good enough: eleven young parrots, which were raised with polenta by the old Mrs. Zarate, were all females and thus only worth half the money, two young grey Guazu vira, which were sent by Don Bailon Benitez, were full of worms and typical doomed to die and which he only keeps for three pesos per animal out of charity. But when receiving the three half grown rheas, which were brought in bags by the Capataz of La Urbana after a day long ride, he desperately said with tears in his eyes: "The poor animals, the poor unfortunate rickets animals!" and he paid half the price. To make a long story short, this man was grotty, grotty until the end! But should the poor people take back their animals again? Less is a little more than nothing, and so they left everything with him and rode back while shrugging(…)

(Krieg 1933, translated from German by Simone Weyand).

It is impressive, how this paragraph of the story of 1933 resembles all tragic circumstances of the present behavior, the cheapest boxes for transport, the promise that one doesn't earn anything, that it is all about the poor people, the gradual exploitation going all the ways to the Indians, the dumping of the already cheap prices… One only needs to replace an oxcart by a four by four station wagon and the horsemen by mobile phones for spreading the news and no one would think that this story is already 80 years old. Professor Hans Krieg undertook two big research trips through the Chaco from 1923–1927 and from 1931–1932 and published next to stories an entire range of scientific publications about this expedition.

Fig. 3
A collared anteater, *Tamandua tetradactyla*, like this specimen was transported in a 20 litre bucket. Anteaters from Paraguay had been sold to the zoos of Leipzig and Dresden, Germany being aware to buy wild caught animals (Arndt 2011).

about populations and their development through monitoring, so that the harvested amounts are sensibly allocated, and that they are linked to respective areas. In addition, all of this is controlled, violations are seriously punished and everything is adapted regularly towards changes. This can be read for example in the adopted "The IUCN Policy Statement on Sustainable Use of Wild Living Resources" of the IUCN World Conservation Congress 2000 (IUCN 2000). Obviously species will not become endangered in this ideal case. In reality however, this is generally not the case in the source countries as we will show in the following paragraphs.

Reality

Recently the IUCN published the update of the red list. It turned out that 40 % of reptiles of Madagascar are endangered (IUCN 2011). The cause for this is equally due to loss of their habitat and as well as overexploitation for the pet market. Frankly speaking the loss of habitat is not acceptable as an excuse because the conditions of a sustainable use say explicitly, that the state of the ecosystems has to be taken into context (IUCN 2000). This is good and important, because the threat is cumulative. The problem is that animals are not hunted in regions where they lost their habitats anyways, but instead animals are caught in the remaining healthy habitats.

It is in particularly tragic that it is Madagascar itself which is in catastrophic condition. Since 2001 it has been the first country to undergo long term and country wide "Significant Trade Review" and because of serious concerns, it has been decided that in parallel there is no trade with species listed under CITES. However, while CITES investigated the protected species, the trade of other species without any protection was continued and as a result the endangered species of Madagascar include meanwhile a wide range of non protected species. The value of trade for timber and animals is much higher than even tourism, although a turtle or a primate is worth less than one dollar (Lee 2011).

This is not unique and concurs with experiences in South America. The wildlife trade always finds loopholes for exporting animals on a legal route in large numbers out of their home countries with help of bad infrastructure and/or corruption of less developed countries.

The new trend: unprotected species

Trade with wild animals has recently been focused on non-CITES listed species in order to avoid national and more import international pressure, as well as to circumvent unpleasant population studies. In particular some very rare, endemic and therefore especially precious species are collected. It doesn't mean however, that those species are not endangered, just that those rare species are not yet part of the elaborate process to be listed in the official protection agreements.

This is partly due to the fact that CITES is only able to react once a dramatically increased business with those species has been established and additionally the CITES conference for including protected species in the list only takes place every three years. This may have been sufficient during the seventies in the last century when CITES was founded but in today's rapidly changing digital world, it is an outdated system. The legal business with animals makes use of this in order to export those species intensively before requests for their protection are (i) being submitted, (ii) are in preparation, or (iii) are discussed and thus before all diplomatic steps are taken.

Moreover these people appear responsible in the animal business, because they are not (yet) touching protected animals.

Experiences from Paraguay

In January 2011, we have been called in to a hotel in the village, in order to review confiscated wild animals. After arriving at the hotel, we were shown a picture of horror. In front of the hotel heaps of buckets were piled up, bags and boxes full of wild animals were in a rather poor state. Aside from armadillos, which were piled up on top of each other in a big container and which were heavily traumatized and injured. We also found a wide range of different and mostly dehydrated amphibians, some of which were dead and squeezed into a 20 litre bucket there also was a collared anteater. Shortly after, we were called to another hotel, where again the room was rented there in order to accommodate animals. The picture was similar. On the floor there were dying armadillos, in 20 litre containers, bags, boxes and buckets some more armadillos, amphibians, reptiles and tarantulas were stored. Additionally a car was confiscated containing an estimated 200 snakes and lizards contained in plastic bottles (we did not have

Fig. 4
A chaotic pile of buckets, paperboards and bags was found in the hotel.

any access to these). Looking in, we saw that several animals shared a single bottle. More than 2000 animals were confiscated and the district attorney asked us to document everything by filming, because we had to release most of the animals from their containers in order to give them a chance to survive. We started to give water to the dehydrated animals and rinsed the frogs so that they would not intoxicate each other due to the high density they were paked in. We gave first aid where needed.

Delegates of the bureau for environmental affairs, as well as the main attorney of the secretary for internal affairs came all the way from the capital in order to take the lead in the investigation. In Paraguay all animals and plants are protected and transport and commercial business involving them needs special permission. Actually the dealer had a permission to transport all animals - aside from two specimens not mentioned above. Nevertheless, several mistakes were made during the process and also in Paraguay such a permission includes the responsibility to transport these animals appropriately in particular separately, in suitable containers with appropriate temperatures and in a way that each animal is able to turn around at least. Nothing of the latter however was the case.

Although there were major issues with the law. It has been decided that this animal dealer was allowed to carry out the transport and business with those animals by following minor modifications such as slightly bigger containers which were as unsuitable as the previous ones and with the same amount of animals in them and distributed onto two cars. It is questionable if this was due to lack of knowledge, lack of interest or corruption. Anyhow, it was easy to see the priorities and it was demonstrated impressively what influence the wildlife trade has on authorities.

An interesting aside is that amongst other things, the permission was arranged for a woman, who was already prosecuted in 2004 because of the very same formal defects (not decreasing the numbers of already exported animals in the permission) and infringement of transportation (lizards in bottles etc.) (Risso 2004).

Even after intensive documentation and publishing about the case in the biggest Paraguayan newspaper (ABC Color), which even forced the publicity of these scandalous happenings with our film material (http://www.youtube.com/watch?v=JG5V5I99SVE) and the respective article (Duerksen 2011a) on the homepage of the online version (ABC-Digital), as well as several secondary citations with major public outcry and even with the cause (Duerksen 2011b), nothing happened at all and the very same people continue exporting.

Fighting poorness and exploitation?

The project on which the permissions were granted was meant to support an indigenous tribe in the central Chaco. However the aborigines are really cheated here. There are price lists of the bureau for environmental issues (Secretaría del Ambiente, SEAM) available in the folder of the respective "Project for the protection and use of wild-resources (Proyecto de Conservación y Utilización de la Vida Silvestre") dictating how much has to be paid to landowners for the collected animals and these landowners hire indigenous people for even less money to collect the requested animals. These prices do not reflect the real value of the animals at all and are not sufficient regarding the cost-of-living (Table 1).

For amphibians and reptiles, this is in the double-numbered cent-range. For a rare armadillo a hunter gets about 7 Euro and for a collared anteater or tamandua, which costs about 3500 Euro in Germany —one of the importing countries on the list for example—, a hunter would get just about 30 Euro, but as already well explained by Krieg in 1933 (see inlay) it is less than 20 Euro as reported by Ayoreo Indians. Moreover the Indian takes a big risk of injury, because the hunters do their job at night with Flip-Flops and bare hands in the forests.

Obviously the indigenous people are taken advantage of for the legal animal business. The prices are not correlated with living expenses in Paraguay. This again misleads the Indians to collect higher numbers of animals, to leave the declared collecting areas and as a result entire areas are

Tab. 1

Pricelist of the project for conservation and use of wildlife (Proyecto de Conservación y Utilización de la Vida Silvestre) defined by the Paraguayan environmental authority (SEAM). Conveniently the document contains contracts which include the data of the exporter and just have to be filled in with the name of the land owner and his farm. Furthermore it contains a bundle of papers with colour pictures of the animals, to hand them out to the animal catchers. A closer entanglement of authorities and trade is not imaginable.

Species	Common name	Price in Gs.	Euro
Invertebrates			
Theraphosidae	Athropodes. Tarantulas	1.000	0.17
Dynastes hercules	Hercules beetle	20.000	3.45
Timogenes elegans	Scorpion	4.000	0.69
Amphibians			
Ceratophrys cranwelli	Chacoan horned frog	5.000	0.86
Lepidobatrachus laevis	Budgett's frog	5.200	0.90
Melanophryniscus stelzneri	Bumble bee walking toad	1.000	0.17
Phyllomedusa azurea	Orange-legged leaf-frog	700	0.12
Phyllomedusa sauvagii	Waxy-monky leaf-frog	4.100	0.71
Reptiles			
Ameiva ameiva	Green ameiva	1.000	0.17
Cnemidophorus ocellifer	Spotted wiptail lizard	4.000	0.69
Teius teyou	Four-toed wiptail lizard	1.000	0.17
Tropidurus spinolosus	Chaco spiny lizard	1.500	0.26
Lystrophis semicinctus	Tri-colour hognose snake	4.000	0.69
Oxyrhopus rhombifer	False coral snake. Diamondback flame snake	4.000	0.69
Kinosternon scorpioides	Scrpion mud turtle	3.000	0.52
Mammals			
Tamandua tetradactyla	Collared anteater. Tamandua	160.000	27.59
Tolypeutes matacus	Southern three-banded armadillo	43.000	7.41
Chaetophractus vellerosus	Screaming hairy armadillo	25.000	4.31
Conepatus chinga	Molina's hog-nosed skunk	30.000	5.17
Nasua nasua	South American coati	20.000	3.45
Dasyprocta azarae	Azara's agouti	20.000	3.45
Hydrochaeris hydrochaeris	Capybara	30.000	5.17
Birds			
Ciconia maguari	Maguari stork	150.000	25.86
Platalea ajaja	Roseate spoonbills	200.000	34.48
Chauna torquata	Southern screamer	80.000	13.79
Cathartes aura	Turkey vulture	95.000	16.38
Cathartes burrovianus	Lesser yellow-headed vulture	95.000	16.38
Ortalis canicollis	Chaco Chachalaca	10.000	1.72
Cariama cristata	Red-legged seriema	120.000	20.69
Aramides ypecaha	Giant wood rail	8.000	1.38
Vanellus chilensis	Southern lapwing	5.000	0.86
Jacana jacana	Wattled jacana	7.000	1.21
Columba picazuro	Picazuro pigeon	3.000	0.52
Guira guira	Guira cuckoo	5.000	0.86
Cyanocorax cyanomelas	Purplish jay	5.000	0.86
Cyanocorax chrysops	Plush-crested jay	5.000	0.86

cleared with catastrophic results for the populations.

We could not get anywhere by using the political branch and so we counted on obtaining knowledge and informed the Indians about the value of the animals by using different routes so they boycotted continuing hunting and collecting. Meanwhile a "lider" (head of a village) of a large Ayorean community informed us that the heads of several different villages have been bribed, so that through their influence the co-inhabitants keep on collecting for extremely low prices.

In parallel, a consortium of people of different ethnics has been built up in Filadelfia who also collect animals in a wide range and which is integrated into a support program for Indians. The value of this support program for indigenous tribes can be easily calculated; when one thinks that the previously mentioned lady with permissions announced the animals under the company name "Animal Business". If this would be really a support project then it could be surely used as a quality mark with high success rate. In reality however it is a mass export. The permission of just one year and only of this one single company includes 83385 animals (Table 2). And this again leads to the question of sustainability.

The environmental service in charge doesn't carry out any controls and they even report that the animals are only counted and reviewed shortly before export. Therefore neither dead animals are taken into account nor is the area of origin validated. But even if this was so, the permission in some of the cases is not sustainable on the first sight already in particular when observing the Comunidad Ebetogue, which is most adjacent to Filadelfia and with respect to infrastructure it is the ideal "shopping-mall". For instance the permission for collecting here are 155 K*inosternon scorpioides* and 4.129 *Phyllomedusa azurea* on an area of 2.875 hectares which includes villages and farming land aside from xerophytic forest (Tab 2).

Visible results

Until a few years ago *Kinosternon scorpioides scorpioides* (Linnaeus, 1766) was one of the most frequent and present species in the Paraguayan Chaco (Vinke & Vinke

Fig. 5
The Southern three-banded armadillos, *Tolypeutes matacus*, piled up in a 200 litre barrel we found completely paralyzed by stress.

2004, 2007). Only four years ago we wrote: "It is astonishing that especially in such an arid area it is an aquatic turtle which is the most present chelonian species. *Kinosternon scorpioides scorpioides* is basically present everywhere" and further: "We visited an area which had to suffer from a drought for three years and men and animals have suffered and given up. However, shortly after rain started there were *Kinosternon scorpioides scorpioides* around" (Vinke & Vinke 2007). And it is due to this behaviour which causes this species and also several amphibians to end up in trouble. The Paraguayan Chaco is subject of a continually change between drought and flooding. In order to survive, several animals must to look for places in which water accumulates and remains for a while after heavy rain. During this period it is possible to collect them "en masse". In the case of *Kinosternon s. scorpioides*, this lead to a total breakdown of their population in wide ranges of the Chaco. Places where one usually found a large number of those turtles are totally cleared now. It is questionable if the populations can ever recover.

Although *Kinosternon s. scorpioides* have been relatively expensive turtles, which were kept by only a very few specialized keepers, meanwhile their price is totally decreased. In the USA this turtle is a "bargain-turtle" costing no more than 30 dollars. Similarly in Europe, the price is decreasing. Since *Kinosternon s. scorpioides* is not one of the preferred pets amongst reptiles, therefore this is tried to be compensated by a very low price.

The very same destiny is shared not only by turtles in this country but also by mammals, amphibians and other reptiles. As an example the populations of armadillos and monkey tree frogs are now dramatically decreased.

Fig. 6
Mueller's narrow mouth frogs, *Dermatonotus muelleri*, are so-called explosive breeders that means in an arid region like the Chaco it is easy to collect nearly a complete population by choosing the right day and place.

The only sustainable bit in this entire story is the damage to nature. Even for Indians this is not a sustainable business, because the prices are decreasing in the import countries by the large number of animals, therefore salaries become smaller and smaller and at the same time it becomes more and more difficult and time consuming to collect animals as they become rarer.

Reactions by importing countries

Similar to Madagascar, the irresponsible business with wild animals has been known for a long time in Paraguay (Vinke & Vinke 2000), which eventually lead to a "voluntarily" embargo for the business with any kind of protected animals (CITES, Notification to the Parties 2003/058). Since August 2009, a lifting of this moratorium has been heavily pushed (CITES, Notification to the Parties 2009/036) and is about to be due (CITES, Notification to the Parties 2011/009) although there are no structures of control in place to date.

The attitude of the SRG (Scientific Review Group), which is the responsible EU commission for issues regarding species protection, is really bizarre. On one side they support the export of timber of Palo Santo, *Bulnesia sarmientoi*, an extremely slowly growing tree, which is endemic in the Chaco

Collecting areas		**Carmelo Peralta**	
Size *		**20,000 ha**	
Species	**Common name**		
Invertebrates			
Theraphosidae	Athropodes, Tarantulas	3,375	
Amphibians			
Odontophrynus americanus	Lesser Escuerzo	450	
Ceratophrys cranwelli	Chacoan horned frog		
Lepidobatrachus laevis	Budgett's frog		
Bufo granulosus	Granulated toad	1,350	
Bufo paracnemis (*Rhinella schneideri*)	Cururu toad	1,350	
Bufo pygmaeus (*Rhinella pygmaea*)		900	
Melanophryniscus stelzneri	Bumble bee walking toad	18,000	
Phrynohyas venulosa (*Trachycephalus venulosus*)	Marbled tree frog	900	
Phyllomedusa azurea	Orange-legged leaf-frog	3,600	
Phyllomedusa sauvagii	Waxy-monky leaf-frog		
Dermatonotus muelleri	Mueller's narrow mouth frog	1,350	
Reptiles			
Amphisbaena camura	Crooked Worm Lizard	90	
Polychrus acutirostris	Brasilian bush anoli	360	
Homonota horrida	South American marked gecko		
Lygodactylus wetzeli	South American dwarf gecko		
Phyllopezus pollicaris	Brazilian gecko	180	
Ameiva ameiva	Green ameiva	270	
Cnemidophorus ocellifer	Spotted wiptail lizard	270	
Teius teyou	Four-toed wiptail lizard	450	
Tropidurus spinolosus	Chaco spiny lizard		
Micrurus frontalis	Southern coral snake	45	
Drymarchon corais	Eastern Indigo snake	45	
Leptophis ahaetulla	Parrot snake	90	
Lystrophis semicinctus	Tri-colour hognose snake	90	
Philodryas mattogrossensis	Matto Grosso racer	45	
Philodryas patagoniensis	Patagonian racer	90	
Oxyrhopus rhombifer	False coral snake, Diamondback flame snake	90	
Kinosternon scorpioides	Scorpion mud turle	135	
Mammals			
Didelphis albiventris	White-eared opossum	90	
Chaetophractus vellerosus	Screaming hairy armadillo		
Chaetophractus villosus	Big hairy armadillo		
Euphractus sexcinctus	Six-banded armadillo	45	
Tolypeutes matacus	Southern three-banded armadillo	45	
Tamandua tetradactyla	Collared anteater, Tamandua	45	

Campo Loro	10 de Febrero	Ebetogue	Tunocojai	Ingapui	Chovoreca	Total
10,475 ha	**5,000 ha**	**2,875 ha**	**3,122 ha**	**5,000 ha**	**20,002 ha**	**63,352**
900	750	3,890	60	240	2,250	11,465
120	100	518	8	32	300	1,528
120	100	518	8	32	300	1,078
120	100	518	8	32	300	1,078
360	300	1,556	24	96	900	4,586
360	300	1,556	24	96	900	4,586
360	300	1,556	24	96	900	4,136
						18,000
240	200	1,037	16	64	600	3,057
960	1,800	4,149	64	256	2,400	13,229
360	300	1,556	24	96	900	3,236
360	300	1,556	16	96	900	4,578
24	20	103	1	6	60	304
96	80	414	6	25	240	1,221
48	40	207	3	12	120	430
24	20	103	1	6	60	214
48	40	207	3	12	120	610
72	60	311	4	19	180	916
72	60	311	4	19	180	916
120	100	518	8	32	300	1,528
120	100	518	8	32	300	1,078
12	10	51	0	3	30	151
12	10	51	0	3	30	151
24	20	103	1	6	60	304
36	30	155	2	9	90	412
24	20	103	1	6	60	259
24	20	103	1	6	60	304
24	20	103	1	6	60	304
36	30	155	2	0	90	448
24	20	103	1	6	60	304
12	10	52	0	3	30	107
		52				52
6	5	26	0	2	15	99
12	10	51	0	3	30	151
						45

Collecting areas		Carmelo Peralta
Size *		**20,000 ha**
Species	**Common name**	
Mammals		
Eira barbera	Tayra	9
Galictis cuja	Lesser grison	9
Nasua nasua	South American coati	225
Dasyprocta azarae	Azara's agouti	90
Galea musteloides	Yellow-toothed cavy	450
Dolichotis salinicola	Chacoan mara	
Lagostomus maximus	Viscacha	
Hydrochaeris hydrochaeris	Capybara	450
Birds		
Platalea ajaja	Roseate spoonbills	45
Theristicus caerulescens	Plumbeous ibis	22
Mycteria americana	Wood stork	22
Syrigma sibilatrix	Whistling heron	22
Theristicus caudatus	Buff-necked ibis	22
Chauna torquata	Southern screamer	90
Cathartes melambrotus	Greater yellow-headed vulture	45
Total		**35,251**

* The size was evaluated and cross checked using records of the department's government and the Association of Services of

Tab. 2
Amounts and species as well the permitted collecting areas of the permits issued in 2010 which had been attached at the temporarily seizure of January 2011.

and listed in appendix II of CITES and which is excluded from the CITES-Embargo by a Paraguayan sleight of hand (Summary of the 57. Meeting of the SRG), on the other side they declare two frogs species, which are undergoing mass export (*Phyllomedusa sauvagii* and *Leptodactylus laticeps*) to be in appendix D, therefore to be declared when imported, because they are "are being imported into the Community in such numbers as to warrant monitoring" (Commission Regulation (EC) No. 407/2009 of the 14 May 2009).

Albeit such repeatedly and clearly seen hints of severe issues regarding species protection and additional injury regarding sustainability, it is only a question of time until the market for protected animals in Paraguay is open again.

The ending

Even though the actual animal collectors get only a fraction of the real value generated through their efforts, one should not underestimate that legal trade with animals is an enormous economic factor. Studies from 2007 carried out by TRAFFIC showed that the worldwide market with living wild animals (in explicit the actual pet market plus the zoos) is estimated to be about 406 millions Euro, nearly 120 million (118.200.000) of which are already allocated to the European Union exclusively. It is not surprising that such amounts of money lead to more. But this also shows how big the responsibility of Europeans should be, that the hunger for something special is not resulting in extinction of nature (WWF 2007).

Campo Loro	10 de Febrero	Ebetogue	Tunocojai	Ingapui	Chovoreca	Total
10,475 ha	**5,000 ha**	**2,875 ha**	**3,122 ha**	**5,000 ha**	**20,002 ha**	**63,352**
1	1	5	0	0	3	19
1	1	5	0	0	3	19
						225
						90
72	60	311	5	19	180	1,097
24	0	103	1	6	60	194
12	10	103	0	3	30	158
						450
						45
						22
						22
						22
						22
						90
						45
5240	**5,347**	**22,737**	**329**	**1,380**	**13,101**	**83,385**

Cooperation between Indigenous Tribes and Mennonites (ASCIM).

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Fig. 7
For many marbled tree frogs, *Phrynohyas venenosa*, it was too late to save their lives – they had poisoned each other with their secretions.

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Fig. 8
The scorpion mud turtles appeared to have been relatively lucky at first sight. However, obviously the turtles awoke recently after the extremely long aestivation due to the drought, and we found them in quite a poor condition.