

Intervention and follow up/monitoring in an Escobar area concerning the problem of free raging dogs.

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Summary

In an area of 25 square Km in Escobar, Buenos Aires, Argentina, we did the capture-neuter-assessment and monitoring of free raging dogs starting early February 2019 and during one whole year. The free raging dogs (*Canis Lupus Familiaris*) represent many problems such as: social, health and the conservation of natural areas.

In this work we have different socioeconomic backgrounds and natural reserves (delta ecoregion and ecotone with pampean grassland). In these places the free raging dogs represent the competitors towards the native fauna; they can be as well predators and disease transmitters/carriers; although to measure the impact is not so clear due to the human activities and developing communities. The move of the free raging dogs is related in an indirect and direct way of human activity.

With a total of 144 days and 1008 working hours, 71 dogs were captured, sanitary checked and spayed in the Centro de Zoonosis de Escobar, where they were reported/registered. The capture methods depended on the field conditions, the behaviors (using etograms) and the type of injuries that can be caused for the future of the dog, depending on his destiny after his evaluation. With the constant following up we could stabilize the population in this area, and control the health and impact of these dogs.



INTRODUCTION

Dogs are a problem for health conditions and species' conservation; one day they are precious pets and the next day they are abandoned, they get lost or the dog just runs away. In all these premises, the main character of the problem is the human being since dogs were tamed 15.000 - 40.000 years ago. Our habits as society, the bad handling of the waste and the choice of taking individuals less harsh to human beings, developed a relationship that nowadays has a lot of problems. The actions in the field to better understand the population problem of these dogs are few. It will help for this, and to take actions in the area to be studied; to have a closest estimation as of how many dogs have owner, and how many don't. Works made out of surveys are not enough to be able to look and make decisions. The definition of free raging dog is that it has been abandoned, or even having an owner; he is walking freely in public areas without direct control (Brusoni et al., 2007; Guerra et al., 2007; WSPA, 2007; OIE, 2010).



Some of the dogs are neglected to the street so they can find their food in the waste of the streets or markets, or they are abandoned when owners are not able to take care of them (Brusoni et al., 2007; Romero, 2008). In some places it is allowed that dogs walk freely. The lack of homes for dogs it's reflected in actions such as the dogs' shelters.

The dogs' population must be controlled thru the responsible ownership to reduce the risks that are caused (OIE, 2010; Zunino et al., 2000). In some natural areas, the population of free raging dogs is higher than the native carnivores/meat eaters, which causes a big impact in the ecosystems/environment and its

native fauna (Vanak y Gomper, 2009a; b; Silva-Rodríguez y Sieving, 2012; Lessa et al., 2016).

Dogs have many problems, not only as a social status, dogs are abandoned or there is a problem with the ownership; the lack of consciousness leads to negligence.

Leaving a dog in the streets has no relation with the social status/economic situation; it may happen to have more statistics problems in low income areas, but it has been reported that abandonment and bad manners towards dogs has happened in places with higher incomes, so the negligence is not related with social status or income level.

The remarks regarding the interactions between the free raging dogs and the native fauna are not important, only few dogs with poor health conditions and their hunting behaviors were focused in rodents like the Coipos and Cuises of that area, these species are abundant in this place and are not in critical status according to the IUCN. The free

raging dogs were not efficient when hunting birds/poultry and they finally ended eating what they found in the waste of the surrounding communities or the rodents. It's understood that the energy spent for a hunting it's related to the number of members of this group, the variation in behavior is based on the number of the members of the group. On the other hand, we found that dogs living with owners are more efficient when hunting fauna; the relation between the fitness of the dog and the spent of energy when hunting, its better in dogs living with owners, and not in the free raging dogs.

Another finding is that those dogs that went/walk far from the natural delta zone, did not succeed and couldn't develop, it seems that the field/geographical conditions are not good to allow the dogs adaptation in those areas and they have 2 natural destinies: either they survive, or they go back to the city areas to find food in the waste.



Intervention area in Escobar

METHODOLOGY

The first step was to make a count of free raging dogs population located in a radius of 35 km in Escobar, Buenos Aires province, Argentina; the counting was +/- 30 individuals. The census / counting were done in 7 paths of 5 kms (total distance 35 km), it takes 7 hours by foot per day. It is done 3 days per week that started in February 2019 till March 2020 (some days were not worked due to weather conditions of the area). In this way we look for indicators/parameters that can lead us to take actions to reduce the problem.

The quantity of individuals changes due to the moving of the dogs to other places, in different timings and days of the month. Even if the result of the census may change due to weather conditions or resources, we thought that it could be correct to make the count when we have direct contact with the individuals. Important to say that when the

females of the group were in heat, the group's population increased with dogs with owners or without owners creating disruptions in the local population (aggressive behaviors, barks, stool of sick dogs in the area, etc.).

During the walk we looked and analyzed the dogs' disposition and use they make in the place where they move and develop their activity. Analyzing their performance and having their random (ad libitum) records, the captures were focused. To capture the dogs, tomahawks traps cages and catch nets of 1m of circumference were used.

THE CATCH

Capturing the dogs has been a controversial topic because they say some methods are not ethical and are not in accordance to the animals' protection law. We look for alternative methods, the free ranging dogs many times are afraid of people and you cannot get near them which make difficult to catch them. The tranquilizer darts are not and will not be an option due to the water mirrors in the area and the problem to find them again while the dart is making effect. Regarding the trap cage, we have not been successful, only one dog was captured and after this, even changing the baits, no dogs came near to the cages so it turned to be more difficult the capture



of the dogs. The catch can be a success depending on the size of the cage trap, and the speed and physical condition of the dog. The social learning of the dogs makes that they change constantly the conduct/behaviors patterns based on what they are living in their environment, this plasticity does not allow to develop a one and only strategy to catch the dogs which takes more time (or delays) to develop the intervention on the job.

The best strategy was to develop records of conduct patterns with their walking paths, and to develop a strategy in accordance to the geographical place where they are, catching them with a net and locking them up, then they are transferred in the kennel to the shelters to plan the following steps.

NEUTER AND SANITARY CHECK UP

After the capture (N=71), dogs were neutered and checked up in the Centro de Zoonosis de Escobar by vets and management working there. The team work between public and private sectors, and ONG's; makes that the intervention flows smoothly in action times and focusing in resources of the assessment of the area.

BEHAVIOR EVALUATION

After the capture and checked up of the dogs, we need to revise their behavior. The tests consist in having as much performance information (random records / ad libitum) as possible before the catch, for example, to know if it is a free raging dog that lives in the area in a constant way that has no owner or if it has interaction with people. When we get this data, we will find out that the behaviors they have are not sociable with human communication or interactions; besides that, we need to know the type of food they eat, if they interfere with the native fauna, and if they, with which species, knowing the relevance that this means and has. A lot of these dogs cannot improve their behavior if they are not captured in an early age, this makes that the decisions we take can be of letting them go / free them, with a constant monitoring to make them change their habits, towards humans' fears, food and/or interaction with native fauna.



Other types of dogs are the ones that had to be sanitary attended by vets and the ONG's and/or volunteers for the sanitary checkups, this type of individuals, show a different way of interaction which makes it difficult for them to go back to freedom and survive. These are just a few examples of the different situations and complexities that we face. But each dog is analyzed based on their situation and how they can survive in controlled environments like adoptions, or living freely.

FOLLOW UP AND COEXISTING IN NATURAL RESERVES

The follow up is made constantly, some of these dogs, depending on their situation, are creating disruptions with barks, to correct this we observe and monitor behaviors so

they can live in a more “city look like” environment than a natural one. In case of the eco Delta region, we have seen that the free raging dogs that do not have an owner are not interfering nor competing with the native fauna. The flora / vegetation is not good for their development, but on the contrary, with the eco pampean grasslands, being more flat/plain the vegetation is not growing together; the dogs can develop all their potential like hunting rodents (although no birds). There are no records of free raging dogs without owner, or interactions with people that manifest a hunting behavior towards these species. We think that the metabolic expenditure of these dogs for hunting is high, and if they don't have good results they will be wasting their strength, we have records that these dogs eat the waste we generate, plus some feeders near the city so this may stop their move; we check this constantly.

RESULTS

The results we have to date is 71 captured animals in 1 year, 9 free raging dogs neutered and checked and sanitary controlled which are being monitored. The rest of the dogs were checked about their health, depending on the case and their behavior so they can be given for adoption.

The work is worth when there is interaction between the different sectors and professions taking care of the problem, the speed to take certain actions makes the results come out. The interesting thing about this work is that after the catch of these dogs, we can see more native fauna coming out like: wild cats, capybaras, a lot of birds, black swans, raptors, etc.

The intervention and constant follow up are the actions that make possible to have results, also, we were only a few people working on this for the size of the task, to collect data is a huge job and day to day we have more information that can help to better understand this situation.

CONCLUSION / FINAL BALANCE

The working in progress was giving us a clearer sight; without intervention and an active city with its dynamics, dogs can increase their population and cover big extensions of land. As it is not possible to control or stop the dynamics in the cities, the intervention is a key topic to control the population of the free raging dogs. The commitment between enterprises, public health institutions and ONG's is fundamental to be able to make an intervention without disruptions and that can be developed smoothly. The job and monitoring must be made in constant way in the area; doing it occasionally or doing it every couple of months, will not lead to positive results in the reduction and control of the populations of the free raging dogs. These long timings without follow ups will make difficult to monitor the moving of the dogs and to recognize the new dogs that are not

neutered in the current groups. The problem will be to spend time just catching and rescuing dogs constantly, instead of helping to reduce the population and getting to know the health7sanitary status of them.

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