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The Independent Spirit of Turkey: Wild Horse

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Abstract

In the past, horses were used for pulling and riding at agriculture and transportation services. As a result of the increase in mechanization they have lost their own importance in these areas, and then they were released into the nature by owners. These wild horses named Yılkı were spending the winter in nature during their first years and then were captured in the spring for using in farm activities. Due to they have not been used for this purpose today, the Yılkı population increased. Today, wild horses are living in mainly Karaman (Karadağ), Kayseri (Erciyes Mountain), Manisa (Spil and Yunt Mountains), Afyon (Akdağ, Kumalar Mountain, Emirdede Plateau), Samsun (Kızılırmak Basin), Izmir (Gediz Basin), Antalya (Eynif Plain and Beydağlar) provinces, Kaz Mountains and in different regions of Turkey in groups of 15-20 heads. By adapting to wildlife and increasing their number, these wild horses began to pose a threat to other wild animals and agricultural land in the region due to the food shortage during the heavy winter months. Due to this reason, the studies are being carried out for recording wild horses, making their care and treatments, and reducing the number of horses to the level of capacity of living area. This paper has focused on wild horses, their regions and some methods used to be kept their numbers under the control.

Keywords: Horse, Wild horse, Wildlife

INTRODUCTION

In the past, horses were used for pulling and riding at agriculture and transportation services. The widespread use of mechanization has led to a gradual decline in the number of horses in agriculture and transport. On the other hand, horses, which are unused, have been released into the wild and have begun to live freely in some areas then the numbers of them in the nature increased by reproduction (14, 15). These horses have acquired many names associated with them such as; wild horses, mustangs, feral horses, free roaming horses and yılkı (20).

Yılkı are living in mainly Karaman (Karadağ), Kayseri (Erciyes Mountain), Manisa (Spil and Yunt Mountains), Afyon (Akdağ, Kumalar Mountain, Emirdede Plateau), Samsun (Kızılırmak Delta), Izmir (Gediz Delta), Antalya (Eynif Plain and Beydağları) provinces, Kaz Mountains and in different regions of Turkey in groups of 15-20 heads. The number of yılkı in some regions in Turkey exceeded the carrying capacity of the region and began to cause some problems (14, 15).

Many researchers report that the population of wild horses growth rate is 15-20% per year, which means that the population doubles after 5 years. The extreme increase in the annual population can pose threats to pastureland, water resources, other wild animals in the region, people in nearby settlements, domestic animals and fields. If the increase in populations of wild horses is 5% or more, human intervention may be necessary (4, 5, 10, 12, 16, 20).

The questions that come to mind in this case are;

- How many wild horses can be hosted without causing a damage?
- What are the methods to be used in capturing horses?
- What can be done to keep the population stable?
- What are the recommended solutions for the many horses caught?

Wild horse home ranges vary in size from 0.9 to 48 square kilometers. It depends on; population size, water and forage availability, another wild species in the region and seasonal conditions. These criteria should be taken into account when determining the number of horses in the region (5, 10).

CAPTURE METHODS

The capture methods are trapping, immobilisation, mustering (helicopter or ground) and roping .

Trapping

Trapping involves setting up temporary yards and luring horses into them with a bait, usually salt, molasses or fodder. A trigger is set that will entrap the animals or a one way gate used to keep the animals in the yards until transported. This technique requires knowledge of wild horse movement patterns and social structure. This method have less stress on horses and better for horse welfare than other techniques but have risk of interference with the trap yards by other grazing stock, native and feral animals (1, 2, 3, 6, 7, 8, 11, 18, 19).

Immobilisation

Immobilisation is a technique used in a limited number of situations where precious horses are to be captured or controlled. A dart containing a tranquilliser is injected into a horse, which can then be approached and relocated to holding yards or euthanised. Cost of the chemical used can be higher and a qualified vet is required to administer dosage. Also dart guns being generally only 40-60 metres. The chemical immobilisation method is an impractical, expensive and labour-intensive option. The method may well be considered for the capture of specific horses but it is not suitable as an option for the removal of large numbers of horses (1, 2, 3, 8, 19).

Mustering

Helicopters mustering

Helicopters are used at the large areas to muster wild horses into a holding paddock. This is considered one of the most humane capture methods but It is more stressful on horses than trapping. Large numbers of horses can be captured at one time with this method. This technique is difficult in management programs due to the availability of a helicopter and skilled pilots. The cost of an experienced pilot and helicopter is significant. It is likely to be economic only when horse densities are relatively high. Also mustering can be time consuming and may require a large number of people to bring horses in (1, 2, 3, 8, 19).

Ground mustering

Horses and motorbikes are commonly used to muster and direct wild horses into winged yards attached to holding paddocks. It requires the use of highly skilled riders and has considerable risk due to the need to pursue horses at speed over often rugged terrain. It can be stressful for horses and there is a risk of injury. This technique is generally used to separate a small group of animals from the herd. (1, 2, 3, 6, 8, 19).

Roping

This method involves chasing and roping a wild horse on horseback and leading it to where it can be loaded and removed. This method requires highly skilled riders to chase and rope the horses. Technique removes a small number of horses, is labour-intensive and creates risks for wild horses and horse riders. It is stressful on the horse and there is a risk of injury to the horse. It can mainly used as a method of maintaining numbers to certain level (1, 2, 3, 6, 8, 13, 19).

YILKI MANAGEMENT TECHNIQUES

Wild horse management techniques include fertility control, lowering the proportion of females to below 50%, fencing and shooting (aerial or ground). Different horse management techniques are required depending on issues such as band size, sex and age structure, access, geography and season. A variety or combination of different techniques may give the most effective results.

Fertility control

Current methods include surgically desexing males and females, contraceptive implants for mares, immunocontraception where males and females are immunised against their own sperm or eggs. All three techniques currently require horses to be captured and handled so the method has practical and financial limitations. It has the advantage of being a non-lethal form of population control. This method is a long-term management option because horses are long-lived and reduction numbers is over a long time period (1, 2, 3, 5, 6, 8, 17, 19).

Lowering the proportion of females to below 50%

In this method to reduce population growth rates and prolong the gathering cycle, the number of females in wild horses must be reduced to 50% or less (5).

Fencing

Fencing horses out of sensitive areas is a technique employed where significant values in small areas can be protected by excluding horses. Strategically placed fences direct horses into areas where they are more easily controlled. On the other hand fences need to inspected and maintained regularly. Also the welfare of horses at risk because of limiting water points and making them travel to alternatives. This technique is not commonly used to control animals on public land because it restricts public access and affects the movement of native species. Fencing may be considered in isolated areas of particular concern (1, 3, 6, 8, 19).

Shooting

Aerial shooting

Aerial shooting is considered a viable method of controlling wild horse populations in large-scale programs over inaccessible terrain. In this method trained shooters must be used but they availability limited and costly. Inexperienced shooters may only wound horses and not kill. The main advantage of aerial shooting is that shooters can locate and get close to the animal and any wounded animals can be followed up and killed. On the other hand there is concern about large-scale shooting programs' humane and welfare (1, 2, 3, 6, 8, 19).

Ground shooting

Ground shooting is commonly used to remove horses that cannot be mustered or trapped as a follow-up to removal programs. The shooting of injured or sick animals is sometimes done for humane reasons or when the horse cannot be transported for welfare reasons. It is generally effective in flat and readily accessible country. A major problem with ground shooting compared to helicopter shooting is that it's difficult to follow up and ensure mobile wounded animals are killed quickly (1, 3, 6, 8, 19).

METHODS APPLIED TO CAPTURED HORSES

The most important problem is what will happen to the horses being caught. Some methods can be applied to captured horses are sterilization and back release, hosting around the area where they are surrounded by fences or wire braids, creating and hosting national parks, domestication and rehoming (3).

CONCLUSIONS

As a conclusion, using a combination of techniques is most likely to improve chances of success. Use a cost-effective approach is desirable. The removal process must provide for the humane capture, handling, and removal of horses, not have significant impacts on the natural and cultural values (3).

On the other hand wild horses should not be used as scapegoats for range degradation. Wild horses have many utility in their inhabit. Horses have both upper and lower incisors and graze by clipping the grass, allowing the grass to easily grow back. In addition, the horse's digestive system does not thoroughly degrade the vegetation it eats. It tends to replant its own forage with the diverse seeds that pass through its system undegraded (9).

Horses have useful to other species they share the range with: in winter months, they have the instinct to break through even deep crusted snow where the grass cannot be seen. They also open up frozen ponds with their powerful hooves, making it possible for smaller animals to drink (9).

Wild horses have positive effect of on biodiversity. If they are all removed from a land, wild horse predators, compensate the loss of one of their prey species by increasing their predation on other species (9).

Horses have been admired by people for thousands of years as symbol of power, elegance and freedom. Wild horses are an integral part of the natural system and must be protected and managed in they inhabit. Wild horses must be maintained as a source of native gene. If a proper management system is used so that the land does not exceed the carrying capacity, they can be protected without harming the environment.

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