The Endangerment of the Mexican Grey Wolf

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Contents

Executive Summary

The growing population of the world has effected many animals and their habitats. The Mexican Grey Wolf is one of these animals. They were once one of the most populated animals in the area, but now they are endangered.

Our project focuses on what the population of the Mexican Grey Wolf would be like in the future. We are trying to solve the problem of endangerment of the wolf and want to raise public awareness about it.

To this date we have collected such data as; the life span of wolves in the wild, the life span of wolves in captivity, how many pups can be produced in a litter, the life span of their prey, reintroduction successes, and areas where the Mexican Grey Wolf has lived with ease. We have placed the information we have gathered into the StarLogo program.

Introduction

The endangerment of many animals has become a major problem in the United States. In the United States there is over 100 animals that are endanger of becoming extinct or are extinct. In the state of New Mexico alone there are 22 animals. One of these animals is the Mexican Grey Wolf.

The Mexican Grey Wolf is not just an endangered animal, it is also the mascot for one of our great colleges, the college of the University of New Mexico. As being their mascot, the state of New Mexico has joined with many other states including, Montana, Idaho, and Minnesota to try and protect this wonderful animal.

Statistics have shown that over the last four years alone the environment of the wolves has been cut down severely.

Description

The Mexican Grey Wolf or better known as the Lobo is one of the most highly recognized animals in this state. These wolves are the smallest subspecies of the North American wolves. The average height of a Mexican Grey Wolf is twenty-six to thirty-two inches at the shoulder. The length of the wolf from nose to tail is four point five to five point five feet. Mexican Grey wolves can weigh up to ninety pounds or as little as fifty pounds. Most wolves are brown in color and travel in packs.

The diet of the Mexican Grey Wolf is mainly of larger cattle or things normally found in the wild. Wild animals such as deer, elk javelina, rabbits, pronghorn, and other small animals are a main part of the wolves' diet. At SCZ they serve the wolves a prepackaged carnivore diet.

Mexican Grey Wolves are not dangerous as movies or media would like them to be. Many wolves will in fact let someone touch and even hold their litter without attacking. However, the wolf is still very aggressive and will attack if threatened. Wolves usually live in packs ranging from four to six wolves. The main two are the breeding pair and the others are their offspring. The breeding season runs through the months of February to March. The litter size can be four to six pups. Two to three of those pups

will leave this pack to begin one of their own. Wolves are pregnant for about or around sixty-three days.

Mexican Grey Wolves live in the Montana woodlands, and the cutting and destroying of this land has contributed to the endangerment of these animals. There is no confirmed number of how many wolves are still living in these parts, but the number is to be guessed around seventy-five to one hundred and fifty. One reason for the unconfirmed number is that it changes too much to keep exact count. Many wolves will be doing fine in their natural habitat and then turn up dead. Many farmers either cut the wolves' habitat down, or kill the wolves in fear that they will kill their cattle or livestock.

Many efforts have been made to save the Mexican Grey Wolf. One group that has contributed very much to this cause is the Wolf Recovery Team. It was formed by The Fish and Wildlife Service in 1979. They have done much research on the wolf and have tried numerous times to introduce the wolf back into its natural habitat. Full time Mexican Wolf Recovery Coordinators were appointed in 1991. They have also tried plenty of times to reintroduce the wolf to the wild, but have failed to get a full recovery.

Program Output

```
turtles-own [energy species [wolf food]]

;turtles can be of species wolf or species food
to setup
  setxy random screen-width random screen-height
  ifelse who < food-rate
   [setc black ht setspecies food]
   [setc red setspecies wolf
    setenergy random 10]
  repeat 20 [grow]
end

to grow
  if species = wolf [stop]  ;wolf turtles don't grow food
  rt random 10 lt random 10  fd 1
  if pc-ahead = green [stamp green]   ;food only grows near other food
end

to move
  if species = food [stop]        ;food turtles don't move
  takestep
  eat-food
  reproduce
  death
end

to eat-food  ;turn the patch to black and increase energy
  if pc = green [stamp black setenergy energy + 1]
end

to takestep
  rt random 50
  lt random 50
  fd 1
  setenergy energy - 0.25
end

to reproduce
  if energy > hatch-threshold [setenergy energy / 2 hatch []]
end

to death
  if energy < 0 [die]
end




to setup
  ca
  clearplot
  crt number + food-rate
```

```
  ask-patches
    [if (random 100) < 25 [setpc green]]
  ask-turtles [setup]
  setup-graph
end

to setup-graph
  pp1 ppreset setppc green
  pp2 ppreset setppc red
  setplot-title "Wolfs and Food"
  setplot-yrange 0 300
  setplot-xrange 0 50
end

to graph-it  ;graph the amount of food (scaled) and turtles
  pp1 ppd plot (count-pc green) / 5
  pp2 ppd plot count-turtles-with [color = red]
end

to total-wolfs
  output count-turtles-with [color = red]
end

to go   ;the movebutton, foodbutton, and graphbutton are pressed
  movebutton
  foodbutton
  graphbutton
end

to stop-it
  ;the movebutton, foodbutton, and graphbutton are stopped
  stopmovebutton
  stopfoodbutton
  stopgraphbutton
end
```

Conclusion

After all the research was gathered and was finished reading, I came to the conclusion that recovery in the wild is the best way to help the problem. If by setting the wolves back into the natural habit can put the wild instincts needed for the wolves to survive then I believe that this is best. Setting them back into their habit is costly, but at the same time is more productive than other alternatives.

The idea of a wolf recovery is more possible with recovery programs, such as the Northern Rocky Mountains Recovery Program. These programs are designed for the soul purpose of not only helping the wolves in the wild, but also helping the wolves stay and become independent in the wild. The main advantages of the recovery programs is that they are more hands on with the wolves, and most of all, raise the wolves in the wild, and keeping a close eye on them.

This is not the only solution, but the best one by far. Many things need to be done, including the protection of their habitat. Hopefully one day the Mexican Grey Wolf will be able to live and stay in their natural habitat.

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