9-16-02

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Ely Field Office
HC 33 Box 33500 (702 No. Industrial Way)
Ely, Nevada 89301-9408
http://www.nv.blm.gov

In Reply RefeTo:
4700(NV-042)

SEP 16 2002

Dear Reader:

This letter is to inform you that the Ely Field Office (BLM) in conjunction with the United States Forest Service Ely Ranger District are planning to conduct a wild horse gather during October and November of 2002. The area to be gathered consists of the Monte Cristo Horse Management Area (HMA)/Territory. The area is currently being managed as a single herd due to an interagency agreement and historical location of the wild horses in this area. A capture plan and preliminary Environmental Assessment (Ely E.A. No. NV-040-02-059) have been completed at this time.

We are currently proposing to capture approximately 1105 wild horses and remove approximately 870 wild horses from the Monte Cristo HMA/Territory.

Enclosed is the Monte Cristo HMA/Territory Wild Horse Capture Plan and Preliminary Environmental Assessment. Prior to approval of the Monte Cristo HMA/Territory Wild Horse Capture Plan and Preliminary Environmental Assessment, **if the interested publics have any information, data, etc. that they would like to provide, they may do so prior to October 15, 2002.** Send written comments to James Perkins, Assistant Field Manager, Renewable Resources, Ely Field Office, Bureau of Land Management, HC 33 BOX 33500, Ely, Nevada 89301.

If you have any questions, please contact Jared Bybee, Wild Horse and Burro Specialist, Ely Field Office at (775) 289-1843.

Sincerely,

for James Perkins
Assistant Field Manager
Renewable Resources

(1) Enclosure
Monte Cristo HMA/Territory Preliminary Wild Horse Capture Plan and Preliminary Environmental Assessment

G 11-25-02

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Ely Field Office
702 North Industrial Way, HC 33 Box 33500
Ely, NV 89301-9408
http://www.nv.blm.gov

In Reply Refer To:
4720/4710.4 (NV-042)

DECISION RECORD (DR)
AND
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Monte Cristo Herd Management Area
Ely Field Office

ENVIRONMENTAL ASSESSMENT
NV 040/02/059

INTRODUCTION

The Bureau of Land Management (BLM) Ely Field Office proposes a maintenance gathering of wild horses within the boundaries of the Monte Cristo Wild Horse Herd Management Area (HMA). The primary purpose of the proposed action is to bring the wild horse population into a "thriving natural ecological balance". This would be accomplished by reducing the herd to the established Appropriate Management Level (AML). This should prevent deterioration of the health and condition of the wild horses, as well as the vegetative resources in the short term. The area is currently being managed in conjunction with the Monte Cristo Wild Horse Territory as a single herd due to the historical location and movement of the animals. The current population of wild horses within the herd is 1,105 animals. The AML for the herd is established at 236 wild horses. The AML for the Monte Cristo HMA was established through the allotment evaluation/multiple use decision process. Documents containing this information are filed at the Ely Field Office.

The preliminary environmental assessment (EA) was sent to the persons, groups, and agencies listed on pages 22, 23, 24 and 25 of that document on September 16, 2002, with a 30-day review and comment period. Three comment letters and a voice message were received during this time.

One comment letter was received from The Fund for Animals Inc. (The Fund) concerning the management of wild horses within the Monte Cristo HMA. The Fund also had several concerns about the adequacy of the Environmental Assessment (EA 040/02/059) pertaining to analysis of the range of alternatives. The Fund had many comments that are outside the scope of this analysis. A response to The Fund's comments is available to other interested parties upon request.

A second comment letter was received from the Nevada Department of Agriculture. They are in strong support of removing 963 wild horses to a level of 142 animals along with the application of the immuno-contraception vaccine (fertility control) to released mares. The Department of Agriculture has concerns about deteriorated rangeland health due to the present wild horse population. Another concern is that recruitment rate would allow the population to exceed AML by the next foaling season under the proposed action. This response is addressed in the Decision Record Rationale.

A third comment letter was received from Jack Neal of Moorman Ranch concerning the lack of current management of wild horses and the lack of credibility within government agencies.

One verbal comment was received from the Nevada Division of Wildlife in support of BLM action to remove wild horses.

No changes to the EA were necessary as a result of the comments received.

One change in the document has occurred in paragraph one page eight of the EA. The gather is tentatively scheduled to commence December 1, 2002 instead of October 2002.

SUMMARY OF PROPOSED ACTION

The proposed action is to remove all animals in excess of established AML from the Monte Cristo HMA. This would consist of capturing nearly 100 percent of the estimated 2002 population, or 1,105 wild horses, and removing approximately 869 wild horses. Data would be collected on sex, age, color, and assessment of herd health (pregnancy, parasite loading, physical condition, etc.). Blood samples would be taken to collect baseline data on origination of the horses, genetics, and exposure to equine diseases (such as strangles). Individual animals would be sorted as to age, sex, temperament and/or physical condition, and animals selected to be returned to the range. Immuno-contraception vaccine (fertility control) would be applied to all released mares. Horses determined to be in excess of AML would be transported to BLM holding facilities.

This removal would remove all age classes in the following priority order:

1. Age class: 5 years old and under
2. Age class: 10 years old and over
3. Age class: 6 through 9 years old

The first animals to be removed would be five years and younger, and the second class of

animals to be removed would be 10 years and older. Animals aged six to nine would be left in the field unless they need to be removed to achieve AML.

Multiple capture sites (traps) would be used to capture wild horses from the HMA. Whenever possible, capture sites would be located in previously disturbed areas. All capture and handling activities (including capture site selections) would be conducted in accordance with Standard Operating Procedures. Selection of capture techniques would be based on several factors such as herd health, season of the year, and environmental considerations. The removal of excess wild horses to achieve and maintain AML is tentatively scheduled to commence on December 1, 2002 and last approximately 22 days.

DECISION RECORD

As a result of the analysis presented in the EA, and to be in conformance with the Multiple Use Decision process, it is my decision to approve capture and remove up to 869 wild horses. The Monte Cristo HMA will be gathered down to the appropriate management level of 236 wild horses without the application of the immuno-contraception vaccine (fertility control).

Rationale: Capture and removal of 869 wild horses is being selected due to the topography, thick tree cover, budgetary constraints and high probability that not enough wild horses can be captured to treat with the immuno-contraception vaccine (fertility control). The removal of the first 869 wild horses that are captured will leave a level of 236 wild horses within the HMA. This action is needed in order to maintain a "thriving natural ecological balance" as well as preserve the multiple use relationship within the Monte Cristo HMA. Further, this action is needed in order to prevent the range from deterioration associated with an overpopulation of wild horses.

Capture and removal of approximately 869 wild horses is within the scope of the analysis. Analysis has been done for removal of approximately 869 wild horses within the proposed action. Implementation of this portion of the Proposed Action within the Monte Cristo HMA, which analyzed removing wild horses, will result in short-term impacts to soils, vegetation, wildlife, and wild horses, and will restore a "thriving natural ecological balance on the public lands" in the immediate future. It has been determined the cumulative impacts will be negligible. The decision to capture and remove 869 wild horses will have fewer impacts to wild horses than the implementation of the entire Proposed Action. This decision is well within the analysis of the Environmental Assessment.

FINDING OF NO SIGNIFICANT IMPACT

Based on the analysis in the EA, I have determined there will not be significant impact to the quality of the human environment; therefore, an environmental impact statement is not required.

Rationale: My finding of no significant impact is based on the following:

The action will not affect public health or safety

The action will have no adverse effects on such unique characteristics as cultural or historic resources, wetlands, wild and scenic rivers, wilderness study areas, or areas of critical environmental concerns.

The action will have no adverse effects on federally listed threatened or endangered species, or on designated critical habitat for these species.

The action will not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The action will not involve unique or unknown risks to the quality of the human environment.

The action will have no significant cumulative impacts to wild horses.

REMOVAL DECISION

In accordance with 43 CFR 4770.3 (c), this constitutes my final decision to gather wild horses within the Monte Cristo HMA and is placed in full force and effect.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR, Part 4. If an appeal is taken, your appeal must be filed with the Bureau of Land Management, Ely Field Office, HC33 Box 33500, Ely, Nevada, 89301, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Copies of the notice of appeal and petition for a stay must also be submitted to the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, VA 22203, and to the Office of the Solicitor, U.S. Department of the Interior, Suite 6201, Federal Bldg., 125 South State St., Salt Lake City, Utah, 84138, at the same time the original documents are filed with this office

If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. A petition for a stay of a decision pending appeals shall show sufficient justification based on the following rules:

(1) The relative harm to the parties if the stay is granted or denied,
(2) The likelihood of the appellant's success of the merits,
(3) The likelihood of immediate and irreparable harm if the stay is not granted, and
(4) Whether the public interest favors granting the stay.

11-20-02

James M. Perkins
Assistant Field Manager, Renewable Resources
Ely Field Office

Date

I concur.

11/20/02

Gene A. Kolkman
Field Manager
Ely Field Office

Date

Monte Cristo HMA 9/2002

U.S. Department of the Interior

Bureau of Land Management

Ely Field Office

Monte Cristo Herd Management Area/Territory

Wild Horse Capture Plan and

Preliminary Environmental Assessment

NV-040-02-059

Jared Bybee, Alan Shepherd, Jody Nartz

September 2002

Table of Contents

I. Background Information

With passage of the Wild and Free-Roaming Horse and Burro Act of 1971 (Public Law 92-195), Congress found that: "*Wild horses are living symbols of the pioneer spirit of the West*". In addition, the Secretary of the Interior was ordered to "*manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands*". From the passage of the Act through present day, the Bureau of Land Management (BLM), Ely Field Office has endeavored to meet the requirements of this portion of the Act. The procedures and policies implemented to accomplish this mandate have constantly evolved over the years.

Throughout this period BLM experience has grown, and the knowledge of the effects of current and past management on wild horses and burros has increased. For example, wild horses have been shown to be capable of 18 to 25% increases in numbers annually. This can result in a doubling of the wild horse population about every 3 years. At the same time nationwide awareness and attention has grown. As these factors have come together, the emphasis of the wild horse and burro program has shifted.

Program goals have expanded beyond establishing a "*thriving natural ecological balance*" (by setting appropriate management level (AML)) for individual herds, to include achieving and maintaining viable, vigorous, and stable populations.

The National Wild Horse and Burro Strategy involves establishing and achieving AML on all Herd Management Areas (HMAs) managed by the BLM, and to achieve and maintain AML on all HMAs following a four-year gather cycle. The numbers of animals projected to be removed, based on this four year rotation, was estimated based on the use of the wild horse population model developed by Dr. Steve Jenkins of the University of Nevada, Reno. Those numbers, by state and year, were first proposed through the President's 2001 budget request as *A Strategy to Achieve Healthy Lands and Viable Herds, The Restoration of Threatened Watersheds Initiative*, and later approved by Congress.

This document has been prepared to assess the environmental impacts of adjusting the numbers of wild horses within the Monte Cristo HMA/Territory located in the Ely Field Office management area and the U.S. Forest Service Humboldt-Toiyabe National Forest (refer to Map 1), as well as removing wild horses that have moved outside the HMA/Territory boundaries. This wild horse herd is being managed in accordance with an Interagency Agreement between the Bureau of Land Management and the United States Forest Service.

AML for this HMA has been established through the Land Use Planning/Multiple Use Decision process based on monitoring data and following a thorough public review. Documents containing this information are available for public review at the Ely Field Office. AML for this Territory has been established in accordance with the National Environmental Policy Act and conforms to the Humboldt National Forest Land and Resource Plan.

Need for Proposal

The Ely Field Office and Ely Ranger District are proposing to implement the capture and removal of wild horses in the Monte Cristo HMA/Territory. The emphasis of this management action would be to maintain a "thriving natural ecological balance", maintain healthy wild horses, improve watershed/riparian health, and make significant progress towards achievement of Northeastern Great Basin Resource Advisory Council Standards and Guidelines. These determinations would be assessed through the collection of data including herd characteristics, sex ratios, age class information, genetic sampling, and overall animal and herd health. This would be accomplished through the removal of wild horses in excess of 236 animals and implementing immunocontraception research protocol. Further information would be collected on herd characteristics, genetics, herd health, and maintaining sustainable rangelands.

Objectives include:

1. ***Reduce reproductive rates to levels which would accommodate a minimum 4 year gather schedule allowing for a maintenance of AML.***

2. ***Ensure the health and viability of the Monte Cristo HMA wild horse population.***

3. ***Re-establish the preselective removal gather sex distribution toward a more "natural" distribution (50/50).***

4. ***Prevent unavoidable pain and suffering through deterioration of the health, and subsequent death of wild horses due to shortages of forage as a result of drought conditions and overpopulation of the herd in excess of the capability of the habitat to support it.***

5. ***Restore and maintain a thriving and natural ecological balance to the range and protect the range from the deterioration associated with overpopulation.***

6. ***Re-establish or maintain herd characteristics, which were typical of the herd at the time of the passage of the Act.***

7. ***Maintain the genetic diversity of the Monte Cristo HMA herd.***

A gather needs to be conducted of the Monte Cristo HMA/Territory to accomplish the above listed objectives. This document analyzes five alternatives including the Proposed Action. Please refer to Appendix 1-X for background about information contained in this document.

B. Relationship to Planning

The proposed action is in conformance with the Egan Resource Management Plan (RMP) and Final Environmental Impact Statement (FEIS) dated December 24, 1983, and resolution of protests received on the proposed RMP and FEIS documents dated September 21, 1984 and the Egan Resource Area Record of Decision (ROD) which was finalized February 3, 1987. It is also

in conformance with the Humboldt National Forest Land and Resource Management Plan dated August 1986, as amended. The proposed action is consistent with the White Pine County Policy Plan for Public Lands as adopted by the Board of County Commissioners of White Pine County, May 1, 1985 and amended June 12, 1985. This plan states in part "*...wild horse herds should be managed at reasonable levels to be determined with public involvement and managed with the consideration of the needs of other wildlife species and livestock...*". The proposed action is also consistent with the "White Pine County Elk Management Plan" dated March 1999.

The proposed action is consistent with the Strategic Plan for Management of Wild Horses and Burros on Public Lands, dated June 1992, and is consistent with federal, state, and local laws, regulations, and plans to the maximum extent possible. The proposed action is consistent with the Interagency Agreement between the Bureau of Land Management, Ely District and the U.S. Forest Service, Humboldt National Forest pertaining to Monte Cristo HMA/Territory Wild Horse Herd Management of June 6, 1994.

AML for the Monte Cristo HMA/Territory was established through the allotment evaluation/Final Multiple Use Decision (FMUD) process for the BLM portion of the HMA including Six-Mile Allotment Evaluation/FMUD, South Pancake Allotment Evaluation /FMUD, Newark Allotment Evaluation/FMUD, Duckwater Allotment Evaluation/FMUD, Moorman Ranch Allotment Evaluation/FMUD, Monte Cristo Allotment Evaluation/FMUD, as well as the Ely Ranger District Blackrock Cattle and Horse Allotment and the Monte Cristo Wild Horse Territory Environmental Assessment and the resulting Finding of No Significant Impact (1999).

Environmental analyses have been conducted in past years. These analyses have covered the impacts of various removal methods on wild horses in order to achieve AML, and other critical elements of the human environment. This document includes:

1) Monte Cristo/Sands Springs East HMAs Capture/Removal Plan Environmental Assessment NV-040-08-15

These allotment evaluations, FMUD's, and EA are available in the Ely Field Office.

C. Issues

Currently there is an issue identified for this pertaining to the proper management of wild horses. New issues may be identified and will be addressed during this EA process.

II. Description of Proposed Action and Alternatives

The proposed action and alternatives represent a reasonable range of alternatives based on the issue and goals identified through previous public scoping efforts.

A. Proposed Action

Removal to 236 wild horses with Fertility Control

The proposed action for the Monte Cristo Gather would be to capture approximately 100% of the estimated 2001 population or 1105 wild horses and remove all animals in excess of 236 animals, the AML established through monitoring data, from the Monte Cristo HMA utilizing the current selective removal strategy as developed by the National Wild Horse and Burro Program Office. It is anticipated that the entire population would need to be captured. This would include removing approximately 869 wild horses and conducting immunocontraceptive research on all released mares, monitoring results as appropriate. The Selective Removal Strategy policy was issued February 2002. This strategy would allow the removal of all age classes in the following priority order:

1. Age class 5 years old and under
2. Age class 10 years old and over
3. Age classes 6 through 9 years old

The first animals to be removed would be five years and younger, the second class of animals to be removed would be 10 years and older. Animals aged six to nine would be returned to the range unless they needed to be removed to achieve AML. Selective removal objectives target removal efforts for excess animals, based on specific segments of a given wild horse population and availability of space in Bureau processing and long term holding facilities.

All of the mares to be released back into the HMA would be treated with a revised immunocontraceptive vaccine, Porcine zona pellucidae (PZP). The inoculation of mares would consist of a liquid dose of PZP vaccine and a time released portion of the drug in the form of pellets. The approach under study incorporates the PZP into a non-toxic, bio-degradable material which can be formed into small pellets. The pellets are injected with the liquid and are designed to release PZP at several points in time during the first three months after injection much the way time-release cold pills work. This formulation would be delivered as an intra-muscular injection by a jab-stick syringe, into the mares in the working chute. Upon impact the liquid in the chamber would be propelled into the muscle along with the pellets. This delivery method has been used previously to deliver immunocontraception vaccine with acceptable results. Such a vaccine would permit a single injection to cause up to two years of contraception at approximately 90% effectiveness.

Delivery of the vaccine would be by means of syringe or dart with a 12-gauge needle or 1.5" barbless needle respectfully. 0.5 cc of the PZP vaccine would be emulsified with 0.5 cc of adjuvant (a compound that stimulates antibody production) and loaded into the delivery system. The pellets would be placed in the barrel of the syringe or dart needle and would be injected with the liquid. Only trained personnel would mix and administer the vaccine.

All treated mares would be identified and freeze marked with the letter "C" on the left hip to enable the researchers to positively identify animals in the research project during the data collection phase.

The removal of excess wild horses to achieve and maintain AML is tentatively scheduled to commence in October 2002 and last approximately 22 days. It is anticipated that the entire population would need to be captured and 869 horses would be removed (see Table I).

Past selective removals have been age based. Selective removal under this alternative however, would not only be age based, but could also be based on other critical population variables as well (sex ratios, historic characteristics, genetic viability, etc.). Selective removal under the proposed action would be structured to reduce effects of specific population issues. Issues which may be addressed with selective removal strategies include: correction of unusual population variables, maintenance of herd structure and composition, and maintenance of long term herd viability.

The BLM and the Forest Service would also engage in the following: Collect data such as animal sex, age, and color; acquire blood samples; assess herd health (pregnancy, parasite loading, physical condition, etc.); sort individuals as to age, sex, temperament and/or physical condition; and return selected animals to the range that represent the historical herd. Horses determined to be in excess of AML would be transported to BLM holding facilities. Determination of which horses to be returned to the range would be based on an analysis of existing and historical population characteristics, as well as age class, sex ratio, and matching historical phenotypes. Returning animals would entail releasing the horses at or near their original gather site.

The following table shows the May 2001 wild horse census data, which was used to determine current wild horse population levels and estimated removal and release numbers:

Table I.

HMA	Census May 2001	Census June 2001	Estimated Population 2002	Estimated #'s to remove[1]	Estimated #'s to release[1]
Monte Cristo	429 (Inaccurate census due to strong winds)	836	1105	869	236

Multiple capture sites would be used to capture wild horses from the HMA. Whenever possible, capture sites would be located in previously disturbed areas. All capture and handling activities (including capture site selections) would be conducted in accordance with Standard Operating Procedures (SOPs) described in Appendix II. Selection of capture techniques would be based on several factors such as herd health, season of the year and environmental considerations.

B. Alternative I:

Removal to 236 wild horses without Fertility Control

Alternative I is to capture approximately 1105 wild horses within the Monte Cristo HMA/Territory. This would include removing approximately 869 wild horses utilizing the current selective removal strategy as developed by the National Wild Horse and Burro Program Office as described in the proposed action, returning approximately 236 wild horses to the HMA, which is the AML established through monitoring data. No fertility control would be implemented.

C. Alternative II:

Removal to 142 wild horses with Fertility Control

Alternative II is to capture approximately 1105 wild horses within the Monte Cristo HMA. This would include removing approximately 963 wild horses utilizing the current selective removal strategy as developed by the National Wild Horse and Burro Program Office as described in the proposed action, and conducting immunocontraceptive research on all released mares, monitoring results as appropriate. Delivery of the immunocontraceptive vaccine would be as described under the Proposed Action. Approximately 142 wild horses would be returned to the HMA.

D. Alternative III:

Remove Wild Horses in Excess of 142 Animals Without Fertility Control

Alternative III is to remove all animals in excess of 142 animals from the Monte Cristo HMA utilizing the current selective removal strategy as developed by the National Wild Horse and Burro Program Office as stated in the proposed action

E. Alternative IV:

No Action Alternative

Under this alternative a wild horse gather would not take place in the Monte Cristo HMA. There would be no active management to control the size of this population at this time. Under this alternative, the current population of 1105 wild horses would continue to increase at a rate of 18-25% annually and would be allowed to regulate their numbers naturally through predation, disease, and forage, water and space availability.

This alternative was eliminated from further consideration due to several factors. Predators do not substantially regulate wild horses in the Monte Cristo HMA. In addition, wild horses are a long-lived species with documented foal survival rates exceeding 95% (Survivability rates collected are as follows: the Pryor herd (>95%; 15 years and younger, except for foals, both

sexes (93%); Granites herd (>95%; 15 years and younger, except for male foals, (92%); and Garfield herd (> 95%; 24 years and younger, except both foals, both sexes (92%). This alternative would result in a steady increase in numbers, which would exceed the carrying capacity of the range.

The population of wild horses would compete for the available water and forage resources. The mares and colts would be affected most severely. The areas closest to the water would experience severe utilization and degradation. Over the course of time, the animals would deteriorate in condition as a result of declining forage availability and the increasing distance traveled to forage. Many horses would likely die through the winter if average snowfall levels are received, especially foals and mares. The health of the wild horse herd population would be reduced, the condition of the range would deteriorate, and other range users would be impacted. Further, heavy forage use would degrade rangeland resources. Rangeland in poor condition provides less forage, and is susceptible to invasion by non-native weeds. Soil health and future productivity of the rangeland would decline.

This alternative is not acceptable to the Bureau nor most members of the public. The Bureau realizes that some members of the public advocate "letting nature take its course", however allowing wild horses to die of dehydration and starvation would be inhumane treatment and would clearly indicate overpopulation of wild horses exists in the HMA. The Wild Free-Roaming Horse and Burro Act of 1971 mandates the Bureau to "*prevent the range from deterioration associated with overpopulation*", and "*remove excess horses in order to preserve and maintain a thriving natural ecological balance and multiple use relationships in that area*". Additionally, Promulgated Federal Regulations at Title 43 CFR 4700.0-6 (a) state "*Wild horses shall be managed as self- sustaining populations of healthy animals in balance with other uses and the productive capacity of their habitat*" (emphasis added).

The No Action alternative would not comply with the Northeastern Great Basin RAC Standards and Guidelines for Rangeland Health and Healthy Wild Horse and Burro Populations, which require that "*Wild horses and burros exhibit characteristics of a healthy, productive, and diverse population. Age structure and sex ratios are appropriate to maintain the long term viability of the population as a distinct group. Herd management areas are able to provide suitable feed, water, cover and living space for wild horses and burros and maintain historic patterns of habitat use*".

The No Action Alternative would violate the Wild Free Roaming Horse and Burro Act, Federal Regulations, BLM Policy and Resource Advisory Council Standards and Guidelines.

Table IV: Comparison of Alternatives

Alternative	Capture Wild Horses	Remove Wild Horses	Release Wild Horses	Data Collection	Fertility Control	Fertility Control Mares Treated
Proposed Action	1105	869	236	Yes	Yes	
Alternative I	1105	869	236	Yes	No	0

Alternative II	1105	963	142	Yes	Yes	
Alternative III	1105	963	142	Yes	No	0
No Action Alternative	0	0	0	No	No	0

F. Alternatives Considered But Eliminated From Detailed Analysis:

1. Removal of the first 963 horses captured or a straight "gate cut" regardless of age class or sex ratio.

This alternative was not considered for detailed analysis because it would be in violation of the current BLM removal policy, which was outlined under the proposed action.

2. Removal of only adoptable horses ages 0-9 years old. All horses age 10 and above returned to the range regardless of age class, sex, or herd structure.

This alternative was not considered for detailed analysis because it would be in violation of the current BLM removal policy, which was outlined under the proposed action.

III. Description of The Affected Environment

A. Monte Cristo Herd Management Area/Wild Horse Territory

The Monte Cristo HMA is located in the southwest portion of White Pine County and the northeastern portion of Nye County, approximately 30 air miles west of Ely, Nevada. The HMA lies on the west slopes and foothills of the White Pine Mountain Range in the Humboldt-Toiyabe National Forest, administered by the United States Forest Service (USFS), and extends into the east side of the Bull Creek drainage in Railroad Valley and the southern part of Newark Valley, administered by the Bureau of Land Management.

The HMA encompasses approximately 473,684 acres. Of that, BLM administers 373,590 acres, Forest Service administers 93,630, and 6,464 acres are private. Elevations range from approximately 5000 feet at the valley floors to over 11,500 feet at Currant Mountain. Vegetative types found within the Monte Cristo HMA vary from salt desert shrub, black sage/grass, Wyoming big sage/grass, Pinyon/Juniper woodland, mountain brush, mountain mahogany, aspen, white fir and mixed conifer. There is one wilderness area, the Currant Mountain Wilderness, partially in the Territory. The total wilderness area is 36,539 acres, and of that 15,382 acres fall within the HMA. The project area lies within deer, elk, and antelope yearlong habitat. Several sage grouse leks are located within the project area. Brood rearing habitat and wintering grounds are interspersed throughout the project area as well.

B. Wild Horses

Currently the estimated horse population in the HMA is 1,105 animals. The Appropriate Management Level (AML) is 236 horses.

The Monte Cristo HMA has undergone several removals since passage of the Wild Horse Act. These removals have incorporated all of the removal strategies identified in the proposed action and alternatives. See Table V.

Table V.

Date of Gather	Number of horses removed
July, 1985	185
Sept., 1994	118
August, 1995	749
February, 1999	311

Sex ratios for wild horses within the Monte Cristo HMA are representative of other HMAs in the Ely District and the West at large. At birth, sex ratios are roughly equal. This balance shifts to favor mares throughout the younger age classes. This pattern shifts again at around 15 years of age favoring studs.

Past capture data was used to determine animal colors and approximate percentage of frequency within the herd. The majority of horses exhibit sorrel (40%), bay (29%), black (7%), buckskin (6%), dun (6%), brown (4%), chestnut (2%), red roan (2%), grulla (2%), palomino (1%), and gray (1%).

IV. Environmental Consequences (Proposed Action & Alternatives)

The following critical elements of the human environment are not present and/or not affected by the proposed action: air quality, areas of critical environmental concern, environmental justice, prime or unique farmland, floodplains, Native American religious concerns, special status species (federally listed, proposed or candidate threatened or endangered species, and state sensitive species), migratory birds, water quality, hazardous and solid wastes, wetlands/riparian areas, or wild and scenic rivers.

Vegetation, Soil, and Water

Proposed Action - Implementation of the proposed action would reduce the wild horse population to AML. However, horse numbers would exceed AML by the first foaling season, which would be in the spring of 2003. Mares would receive a one-year reprieve from foaling. Inoculated mares would foal normally in 2003, but would not have foals in 2004. Near normal foaling rates would resume in 2005. The wild horse population would increase annually, in excess of the upper limit of AML until the next gather, which would be scheduled in

approximately four years. Any recovery of vegetative resources, including riparian areas, would be negligible as the horse population could be twice the identified AML within four years even with the use of immunocontraception.

The proposed action would lessen the impact of hoof action on the soil around unimproved springs and stream banks, which should lead to increased stream bank stability and improved riparian habitat conditions. There would also be a reduction in hoof action on upland habitat area and reduced competition for available water sources. However, within four years resource conditions could return to the present condition.

Impacts to vegetation with implementation of the proposed action could include disturbance of native vegetation immediately in and around temporary trap sites, and holding and processing facilities. Impacts could be by vehicle traffic, and hoof action of penned horses, and could be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites and holding facilities would be re-used during recurring wild horse gather operations, any impacts would remain site specific and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would therefore generally be adjacent to or on roads, pullouts, water haul sites, or other flat spots that have been previously disturbed. By adhering to the SOPs, adverse impacts to soils would be minimized.

Alternative I - Impacts to resources at the time of the gather would be the same as in the proposed action. Implementation of the proposed action would reduce the wild horse population to AML. However, horse numbers would again exceed AML by the first foaling season, which would be in the spring of 2003. All mares would continue to foal at normal rates. The wild horse population would increase annually in excess of the AML until the next gather, which would be scheduled in approximately four years. Any recovery of vegetative resources, including riparian areas would be negligible as the horse population could be twice the identified AML within three years.

Alternative II - Impacts to resources at the time of the gather would be the same as in the proposed action. Alternative II would reduce the wild horse population 40 percent below AML and implement the use of immunocontraception in the Monte Cristo HMA, which would help to promote and maintain a thriving natural ecological balance for a period of approximately five to six years. Mares would receive a one-year reprieve from foaling. Inoculated mares would foal normally in 2003, but would not have foals in 2004. Near normal foaling rates would resume in 2005. This would ensure a vigorous and healthy breeding population, resulting in an increase in forage availability, vegetation density, vigor, reproduction, and productivity, and reducing stress on wildlife.

Alternative II would lessen the impact of hoof action on the soil around unimproved springs and stream banks, which should lead to an improvement in stream bank stability and improved riparian habitat conditions. There would also be a reduction in hoof action on upland habitat area and reduced competition for available water sources for four years.

Alternative III - Impacts to resources at the time of the gather would be the same as in the proposed action. Alternative III would reduce the wild horse population 40 percent below AML in the Monte Cristo, which would help to promote and maintain a thriving natural ecological balance for a period of approximately four years. This would result in an increase in forage availability, vegetation density, vigor, reproduction, and productivity.

The implementation of the Alternative III would prevent the population from increasing beyond 236 animals prior to the next gather, which would be scheduled in approximately four years. This would ensure a vigorous and healthy breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Free Roaming Horse and Burro Act, Resource Advisory Council Standards and Guidelines, and land use plan management objectives.

No Action Alternative - The severe localized trampling associated with trap sites would not occur, however, as wild horse populations continue to grow, soil erosion would increase. Increased use throughout the HMA would adversely impact soils and vegetation health, especially around the water locations. As native plant health deteriorates and plants are lost, soil erosion would increase. The shallow soils typical of this region cannot tolerate much loss without losing productivity and thus the ability to be re-vegetated with native plants. Invasive, non-native plant species would increase and invade new areas following increased soil disturbance and reduced native plant vigor and abundance. This would lead to both a shift in plant composition towards weedy species and an irreplaceable loss of topsoil and productivity from erosion.

Wildlife

Proposed Action and Alternative I - The implementation of either the Proposed Action or Alternative I would result in reduced competition with wildlife as soon as the gather is completed. Temporary impacts during the gather could be displacement of big game and non-game mammals, but they would return eventually. This displacement would be due to the noise of the helicopter and increased traffic. These disturbances could occur during the capture period. Wild horses would exceed the established AML by the first foaling season, which would be in the spring of 2003. Any recovery to vegetative resources and wildlife habitat would be negligible as the horse population could be twice the identified AML within three to four years. AMLs are established based on the carrying capacity of the range to sustain herbivory by multiple species of animals. If the AML is exceeded, the range would be overstocked, and a "natural thriving ecological balance" would not be attained.

Alternative II - Impacts to resources at the time of the gather would be the same as in the proposed action. Alternative II would reduce the wild horse population 40 percent below AML and implement the use of immunocontraception in the Monte Cristo HMA, which would help to promote and maintain a thriving natural ecological balance for a period of approximately five to six years. This would result in an increase in forage availability and quality, improved habitat condition, and reduced competition for available forage and water resources. There would be

reduced disturbance associated with wild horses along stream bank riparian habitat and adjacent upland habitat.

Alternative III - This alternative would have the same impacts as the proposed action during the time of the gather. This alternative would have similar results as identified for Alternative II in overall response by wildlife and their habitat but for a shorter period of time, which is approximately four years.

No Action Alternative - Wildlife would not be displaced or disturbed under the no action alternative, however, there would be continued competition with wild horses for water and forage resources and because wild horses are very aggressive around water sources, some wildlife species may not be able to compete. The continued competition for resources may lead to increased stress and possible dislocation or death of native wildlife species.

Livestock

Proposed Action and Alternative I - Impacts to livestock operations on the BLM administered grazing allotments, due to normal gather activities, could effect livestock in localized areas. Impacts to livestock operations on the USFS administered grazing allotment and BLM allotments, due to normal gather activities, would exist since there is authorized livestock grazing within the gather area during the fall. Most of the impacts would be associated with disturbance caused by helicopter activities and increased vehicle activity within the gather area. However, wild horses would exceed the established AML by the first foaling season, which would be in the spring of 2003. Any recovery to vegetative resources would be negligible as the horse population could be twice the identified AML within three to four years. AML has been established based on the carrying capacity of the range to sustain grazing by multiple species of animals. If AML is exceeded, the range would be overstocked by fall 2003 when most livestock grazing is permitted, and a "natural thriving ecological balance" would not be attained.

Alternative II and III – Alternatives II and III would have the same impacts as the proposed action and alternative I at the time of the gather. However, a reduction to 40 percent below AML in wild horses would lead to less competition between livestock and wild horses, would result in an increase in forage availability and quality, improved habitat condition, and reduced competition for available forage and water resources within the next four years.

No Action Alternative - Livestock would not be displaced or disturbed under the no action alternative, however, there would be continued competition with wild horses for water and forage resources. Livestock operations may be impacted as wild horse numbers continue to climb and the range becomes unable to support both wild horses and livestock.

Wilderness

Proposed Action and Alternative I - No impacts to wilderness values are anticipated to occur since all trap sites and holding facilities would be placed outside Wilderness areas. Wilderness

values would be positively affected by a reduction in wild horse numbers as a result of an improved ecological condition of the plant communities and other natural resources. However, the effects of the horse reduction would last until the next foaling season. At this time a "natural thriving ecological balance" would not be attained.

Alternative II and III - Wilderness values would be positively affected by implementation of these two alternatives as they would result in an improved ecological condition of the plant communities that are aesthetically more appealing to the public than the existing situation. Under these alternatives, wilderness values would be positively affected for four years by a reduction to 40 percent below AML in wild horse numbers, again as a result of an improved ecological condition of the plant communities and other natural resources.

No Action Alternative - No impacts due to trap construction would occur. Impacts to wilderness values would continue to occur in the form of continued degradation of vegetative and soil resources by high numbers of wild horses. To some, the sight of heavy horse trails, trampled vegetation and areas of high erosion, detract from the wilderness experience.

Noxious Weeds and Invasive Non-Native Species

Proposed Action - The proposed gather may spread existing noxious weed species. This could occur if vehicles drive through infestations and spread seed into previously weed-free areas. The contractor together with the contracting officer's representative or project inspector (COR/PI) would examine proposed trap sites and holding corrals prior to construction. If noxious weeds are found, the location of the facilities would be moved.

Alternatives I - III - Impacts would be the same as the proposed action.

No Action Alternative - Under this alternative, the wild horse gather would not take place. The likelihood of noxious weeds being spread by gather operations would not exist. However, overgrazing of the present plant communities could lead to an expansion of noxious weeds.

Cultural Resources

Proposed Action - No impacts to cultural resources are anticipated to occur since all trap sites and holding facilities would be inventoried for cultural resources prior to construction. An archaeologist or a District Archeological Technician (DAT) would review all proposed and previously used trap sites and facility locations to determine if these sites have had a cultural resources inventory, and/or if a new inventory is required. If cultural resources are encountered at proposed trap site(s) or holding facility location(s), those location(s) would not be utilized unless it could be modified to avoid impacts to cultural resources.

Alternative I - III - The impacts would be the same as the Proposed Action.

No Action Alternative - Under this alternative, the wild horse gather would not take place and therefore, no trap sites or holding facilities would be constructed. There would be no possibility

that cultural resources would be damaged as a result of the horse gather, however, high numbers of wild horses can cause damage to cultural resources due to trampling, especially around water sources, where the occurrence of cultural resources is often high.

Wild Horses

Proposed Action - Impacts to wild horses under the Proposed Action may occur to either the individual animals or the population as a whole. These impacts include: handling stress associated with the gather, capture, processing, and transportation of animals. The intensity of these impacts varies by individual and is indicated by behaviors ranging from nervous agitation to physical distress. Mortality to individuals from this impact is infrequent but does occur in one half to one percent of horses gathered in a given gather.

Impacts, which can occur to horses after the initial stress event, may include spontaneous abortions in mares, increased social displacement, and increased conflict in studs. These impacts are known to occur intermittently during wild horse gather operations. Traumatic injuries do not occur in most cases, however, they do occur. These injuries typically involve biting and/or kicking bruises, which don't break the skin. The frequency of occurrence of these impacts among a population varies with the individual. The occurrence of spontaneous abortion events among mares following capture is very rare.

Population-wide impacts can occur during or immediately following implementation of the proposed action. They include the displacement of bands during capture and the associated re-dispersal, modification of herd demographics (age and sex ratios), temporary separation of members of individual bands of horses, re-establishment of bands following releases, and the removal of animals from the population. With the exception of changes to herd demographics, direct population-wide impacts have proven, over the last 20 years, to be temporary in nature with most, if not all, impacts disappearing within hours to several days of release. No observable effects associated with these impacts would be expected within one month of release except a heightened shyness toward human contact.

Observations of animals following release have shown horses relocate themselves back to their home ranges within 12 to 24 hours of release and sometimes much faster.

The effect of removal of horses from the population would not be expected to have a significant impact on herd dynamics or population variables, as long as the selection criteria for the removal ensured a "typical" population structure was maintained. Potential impacts to the horse population from exercising poor selection criteria that is not based on herd dynamics includes modification of age and/or sex ratios to favor a particular class of animal.

The proposed action would mitigate the potential adverse impacts on wild horse populations by establishing a procedure for determining what selective removal criteria is warranted for the herd. This flexible procedure (Appendix I SOPs) would allow for correction of any existing discrepancies in herd demographics, which could predispose a population to increased chances for catastrophic impacts. The proposed action would also establish a standard for selection,

which would minimize the possibility for developing negative age or sex-based selection effects to the population in the future.

Under the proposed action only enough horses would be removed in order to achieve the established AML this year and to implement immunocontraception research protocol. This would result in the HMA being over AML by the first foaling season, which would be in the spring of 2003. Inoculated mares would foal normally in 2003, but would not have foals in 2004. Near normal foaling rates would resume in 2005. The wild horse population would increase annually, in excess of the upper limit of AML until the next gather, which would be scheduled in approximately four years. Consequences of exceeding the established AML is exceeding the carrying capacity of the range, risking the health of the rangelands, and risking the health of the horse herds. Horses would be at risk of death by starvation and lack of water. Fighting among stud horses would increase as they protect their position at scarce water sources and injuries and death to foals, as well as adults would increase. As populations increase beyond the capacity of the habitat, bands of horses may leave the boundaries of the HMA seeking forage and water, which in turn may put them at risk in new and unfamiliar country. Under the Proposed Action, an estimated 71 mares would be treated with immunocontraception. Under Alternative II, an estimated 119 mares would be treated.

Each mare to be released would receive a single-dose of the two-year PZP contraceptive vaccine. When injected, PZP (antigen) causes the mare's immune system to produce antibodies and these antibodies bind to the mare's own eggs, and effectively block sperm binding and fertilization (ZooMontana, 2000). PZP is relatively inexpensive, meets BLM requirements for safety to mares and environment, and can easily be administered in the field. Also, among mares, PZP contraception appears to be completely reversible, and to have no ill effects on ovarian function if the mare is not contracepted for more than 3 consecutive years.

This one-shot application, applied at the capture site, will not affect normal development of the unborn fetus, hormone health of the mare or behavioral responses to stallions, should the mare already be pregnant when vaccinated (Kirkpatrick, 1995). The vaccine has also proven to have no apparent effects on pregnancies in progress, the health of offspring, or the behavior of treated mares (Turner, 1997). The PZP two-year vaccine has proven 90% effectiveness for up to two years if mares are inoculated during the winter months (which would impact two years of foaling). In the case of the Monte Cristo HMA, mares would be inoculated during summer months, rendering the drug nearly ineffective the second year. Only one year of effectiveness is expected according to current research of the drug.

Mares receiving the inoculation would experience slightly increased stress levels from increased handling while being inoculated and freeze branded. There would be additional impact to animals at the isolated injection site following the administration of the fertility control vaccine. Injection site injury associated with fertility control treatments is extremely rare in treated mares, and may be related to experience of the administrator. For the Alternatives associated with fertility control, the injection would be controlled, handled and administered by a trained BLM employee, researcher or veterinarian. Any direct impacts associated with fertility control are

expected to be minor in nature and of short duration. The mares would quickly recover once released back to the HMA.

Population wide indirect impacts would not appear immediately as a tangible effect and are more difficult to quantify. Impacts involve reductions in short term fecundity of initially a large percentages of mares in a population, increasing herd health as the AML is achieved, and potential genetic issues regarding controlling contributions of mares to the gene pool, especially in small populations. The implementation of fertility control would result in an opportunity to allow increased fitness and condition on the mares released following the gather. Up to 90% of the mares treated would not foal in the year 2004. The potential one-year reprieve from foaling would greatly increase overall health and fitness of the mares, as well as the health of the foals born in 2005 and thereafter.

Population modeling was completed for the proposed action running 100 trials in order to determine future herd demographics, and population growth. Modeling indicates that the average (median) growth rate of the herd should be 12% over four years (or until the next gather). The modeling indicated that the wild horse herd average population would number 304 wild horses. The lowest average population was 249 wild horses and the highest average population was 374 wild horses. Refer to Appendix II for population modeling summary graphs.

The range of average growth rates and average population sizes are reasonable and do not indicate that implementation of fertility control under the proposed action would result in growth rates or minimum population size that are so low as to put the population at risk of catastrophic loss or "crash". However, the modeling does indicate that the wild horse population should exceed AML prior to the next scheduled removal. The proposed action most likely won't achieve in a "thriving natural ecological balance" in the next several years, but the objective most likely would be achieved directly following the gather and subsequent year.

The use of fertility control under the Proposed Action is not expected to have any long-term significant direct, or indirect impacts to the Monte Cristo HMA genetic health, long-term viability or future reproductive success of mares within the herd. Implementation of fertility control is expected to improve the health of the mares within the HMA, and improving the health of the foals born to those mares in the future. Improved condition of the mares and foals would aid in the long-term health and viability of the Monte Cristo HMA wild horse population. Reduced growth rates that would occur with the implementation of fertility control would influence herd size at any one point in time, reducing competition for resources and utilization levels of those resources. Reduced growth rates would increase the interval between gathers, having overall beneficial impacts to the entire wild horse population, while contributing to the achievement and maintenance of a thriving natural ecological balance.

Alternative I - Alternative I would have the same impacts as the proposed action at the time of the gather. Under this alternative, only enough horses would be removed in order to achieve the established AML for the Monte Cristo HMA. This would result in the HMA being over AML by the first foaling season, which would be in the spring of 2003. The wild horse population would increase annually, in excess of the upper limit of AML until the next gather, which would be

scheduled in approximately four years. Consequences of exceeding the established AML is exceeding the carrying capacity of the range, risking the health of the rangelands, and risking the health of the horse herds. Horses would be at risk of death by starvation and lack of water. Fighting among stud horses would increase as they protect their position at scarce water sources and injuries and death to foals, as well as adults would increase. As populations increase beyond the capacity of the habitat, bands of horses may leave the boundaries of the HMA seeking forage and water, which in turn may put them at risk in new and unfamiliar country. Population modeling has indicated that under this alternative the average growth rate of the herd in the next four years would be nearly 15% annually, the average (median) population size would be 325 wild horses. Further, the lowest average population size would be 251 wild horses annually. This indicates that AML and a "thriving natural ecological balance" would be achieved only at the time of the gather.

Alternative II - Alternative II would have the same impacts as the proposed action at the time of the gather. Under this alternative, the horse population in the Monte Cristo HMA would be removed to 40 percent below AML and to implement immunocontraception research protocol. The implementation of the Alternative II would prevent the population from increasing beyond AML prior to the next gather, which would be scheduled in approximately four years. Mares would receive a one-year reprieve from foaling. Inoculated mares would foal normally in 2003, but would not have foals in 2004. Near normal foaling rates would resume in 2005. This would ensure a vigorous and viable breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Free Roaming Horse and Burro Act, Resource Advisory Council Standards and Guidelines, and land use plan management objectives. The above impacts are likely to occur but to fewer animals in the long term due to a reduced need to gather more wild horses more frequently. Removing wild horses to 40 percent below AML would result in the HMA maintaining a "natural thriving ecological balance" for a period of four years. The carrying capacity of the range and risking the health of the rangelands and the health of the horse herds would be minimized. Horses would not be at risk of death by starvation and lack of water due to unpredictable weather patterns. Fighting among stud horses would decrease as they less frequently protect their position at scarce water sources and injuries and death to foals, as well as adults would decrease. As populations are allowed to increase to the capacity of the habitat, bands of horses would be less likely to leave the boundaries of the HMA seeking forage and water, which in turn may put them at risk in new and unfamiliar country.

Population Modeling of this alternative indicated that the average (median) population would be 206 wild horses with a average growth rate of 13%. Modeling indicates under this alternative AML would not be exceeded within the next four years and a "thriving natural ecological balance" would be attained.

Alternative III - Alternative III would have the same impacts as the proposed action at the time of the gather. Under this alternative, the horse population in the Monte Cristo HMA would be removed to 40 percent below AML. The implementation of the Alternative III would prevent the population from increasing beyond AML prior to the next gather, which would be scheduled in approximately four years. This would ensure a vigorous and viable breeding population, reduce stress on vegetative communities and wildlife, and be in compliance with the Wild Free

Roaming Horse and Burro Act, Resource Advisory Council Standards and Guidelines, and land use plan management objectives. The above impacts are likely to occur but to fewer animals in the long term due to a reduced need to gather more wild horses more frequently. Removing wild horses to 40 percent below AML would result in the HMA maintaining a "natural thriving ecological balance" for a period of four years. The carrying capacity of the range and risking the health of the rangelands and the health of the horse herds would be minimized. Horses would not be at risk of death by starvation and lack of water due to unpredictable weather patterns. Fighting among stud horses would decrease as they less frequently protect their position at scarce water sources and injuries and death to foals, as well as adults would decrease. As populations are allowed to increase to the capacity of the habitat, bands of horses would be less likely to leave the boundaries of the HMA seeking forage and water, which in turn may put them at risk in new and unfamiliar country.

Population Modeling of this alternative indicated that the average (median) population would be 221 wild horses with an average growth rate of nearly 16%. Modeling indicates under this alternative AML would not be exceeded within the next four years and a "thriving natural ecological balance" would be attained.

No Action Alternative - Under this alternative, wild horses would not be removed from the Monte Cristo HMA. The horses would not be subject to any individual direct or indirect impacts as described above as a result of a gather operation. However, allowing horse numbers to increase unchecked would have several negative consequences to the animals, including starvation, dehydration, and social stress. Population modeling indicates if the current horse population continues to grow without a removal the average population size would be 2318 wild horses and possibly as high as 3322 wild horses. The extreme lowest population after one hundred trials was 1117 wild horses, which are more animals than currently populates the area. Modeling indicates the average growth rate is expected to be a 28% increase annually.

Cumulative Impacts

Cumulative impacts are impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Implementation of the proposed action would reduce the wild horse population to AML in the Monte Cristo HMA. This would help to promote a thriving natural ecological balance, for a short time. A result in an increase in vegetation density, vigor, reproduction, productivity, and forage availability would be for a short time as the population is doubled within three years. Adverse impacts to vegetation with implementation of the proposed action would include disturbance of native vegetation immediately in and around temporary trap sites, and holding and processing facilities. Impacts created by vehicle traffic, and hoof action of penned horses can be locally severe in the immediate vicinity of the corrals or holding facilities. Generally, these activity sites would be small (less than one half acre) in size. Since most trap sites and holding

facilities are re-used during recurring wild horse gather operations, any impacts would remain site specific and isolated in nature. In addition, most trap sites or holding facilities are selected to enable easy access by transportation vehicles and logistical support equipment and would therefore generally be adjacent to or on roads, pullouts, water haul sites, or other previously disturbed areas. These common practices would minimize the cumulative effects of these impacts.

Past, present, and reasonably foreseeable activities which would be expected to contribute to the cumulative impacts of implementing the proposed action include: past wild horse selective removal gathers which may have altered the age structure and composition sex ratios of the wild horse populations, continued livestock grazing in the allotments, and increasing recreational uses. These past, present, and reasonably foreseeable activities would be expected to generate cumulative impacts to the proposed action by influencing the habitat quality, abundance, and continuity for the Monte Cristo HMA/Territory wild horses.

These impacts would be expected to be marked by changes occurring slowly over time. The Ely Field Office would continue to identify these impacts as they occur, and mitigate them as needed on a project specific basis to maintain habitat and herd quality. At the same time, horse herds would be expected to continue to adapt to these small changes to availability and distribution of critical habitat components (food, water, shelter, space, etc.). The proposed action would contribute to the cumulative impacts of future actions by maintaining the herd at AML, and establishing a process whereby biological and/or genetic issues associated with herd or habitat fragmentation would become apparent sooner and mitigating measures implemented quicker.

Mitigation Measures

The proposed action incorporates proven standard operating procedures, which have been developed over time. These SOPs (Appendix I) represent the "best methods" for reducing impacts associated with gathering, handling, transporting and collecting herd data. Additional mitigation measures are not warranted.

Suggested Monitoring

Weed detection would be incorporated into normal monitoring activities. Horses released back into the Monte Cristo HMA after being captured will be monitored to ensure they return to normal use patterns, as well as detection of horses living outside HMA/Territory boundaries.

Intensity of Public Interest and Record of Contacts

Pete Goicoechea
Paris Livestock
Luther K. Wise
Carter Cattle Co.
Robert Dickenson

Duckwater Shoshone Tribe
Duckwater Cattle Co.
John/Gailin Manzonie
Manzonie Irrevocable Trust
Denny Manzonie
Blue Diamond Oil Corporation
Augustine Rapone
American Mustang and Burro Association
Lincoln County Board of County Commissioners
Ms. Sharon Crook
Mr. Steven Fulstone
The Fund for Animals, Inc.
National Wild Horse Association
Nevada Division of Wildlife (Curtis Baughman)
Nevada Outdoor Recreation Association
Ms. Joneille Anderson
Mr. Paul Clifford Jr.
Mr. Craig C. Downer
International Society for the Protection of Mustangs and Burros
Donald A. Molde, M.D.
Nevada Cattlemen's Association
Nevada Division of Wildlife (Mike Podborny)
Nevada Farm Bureau Federation
Nevada State Department of Agriculture
American Horse Protection Association
Animal Protection Institute of America
Commission for the Preservation of Wild Horses
Colorado Wild Horse and Burro Coalition
Wild Horse Sanctuary
National Mustang Association, Inc.
Nevada Humane Society
Nevada Wool Growers Association
Board of County Commissioners—Nye County
Ms. Nan Sherwood
The Humane Society of the United States
Wild Horse Organized Assistance
Mr. David Pete, Goshute Tribal Council
District Ranger, Ruby Mtn. Ranger District
Save the Mustangs
Wild Horse Spirit
Public Lands Committee--Toiyabe Chapter of the Sierra Club
Nevada State Clearinghouse, Wild Horse Commission
Mr. Jerry Millet, Duckwater Tribal Council
Forest Supervisor, USFS, Humboldt National Forest
Roberta Moore

White Pine Sportsmen
Rutgers School of Law-Newark, Animal Rights Center
U.S. Fish & Wildlife Service (Bob Hallock)
Board of County Commissioners—White Pine County
Ms. Christine Stones, Te-Moak Tribe of Western Shoshone
District Ranger, USFS, WP Ranger District, Ely
Ms. Tina Nappe
Eastern Nevada Landscape Coalition
The Nature Conservancy
Red Rock Audubon Society
Nevada Division of Agriculture (Paul Iverson)
Friends of Nevada Wilderness
Nevada Dept of Conservation
Lincoln County Commissioners
Pat Davision, People for the West
Paula Del Guidice
Marvin & Georgette Jessen
Gary Williams
Nevada Division of State Lands
Nevada Wildlife Federation
Natural Resource Conservation Service
Tammy Manzini, Lander County Commission
PFW, White Pine Chapter
Western Range Service
White Pine Conservation District (Tom Sanders)
Fish & Wildlife Service—Reno
Veda Caballos
Saval Ranching Co.
Shoshone-Paiute Tribes
Northern Nevada Native Plant Society
California Mule Deer Association
Charles Moses, Nevada Division of Agriculture
Nevada Natural Heritage
Jack Wilcox
Jon Christensen, High Country News
Western Shoshone Historical Society
Natural Resource Conservation Service, Elko
The Nature Conservancy, Northern Nevada Office
Caroline Hilton
Nevada State Historical Preservation Office
The National Coalition for Public Lands/Natural Resources
John Breitrick
WP Wildlife Advisory Board
Nancy Brackett
PFW Chapter President

Susan Murphy
Eureka Conservation District
BLM, Elko District
Department of Agriculture (Gary McCuin)
Mr. Robert W. Hall, NV Environmental Coalition, Inc.
Eureka County Natural Resources Department
Nevada Division of Wildlife (Steve Foree)
Laurel Marshall
Committee for Idaho's High Desert
Western Watersheds Project
Mr. John McLain—Resource Concepts, Inc.

Internal Review BLM

Alan Shepherd	Wild Horses/Author
Jared Bybee	Wild Horses/Author
Jody Nartz	Wild Horses/Author
Shane Deforest	Invasive, Non-Native Species
Gretchen Burris	Wilderness Values
Jack Tribble	Recreation
Carolyn Bybee	Archeological/Historic/Paleontological
Mike Perkins	Migratory Birds, Special Status Species
Chris Hanefeld	Public Affairs
Melissa Whitemore	Environmental Coordination

Internal Review USFS

Lucas Phillips	Rangeland/Forest Resources
Susan Forbes	Rangeland/Wild Horses
Jerry Green	District Ranger

APPENDIX I

STANDARD OPERATING PROCEDURES

Gathers would be conducted by contractors or agency personnel. The same procedures for gathering and handling wild horses and burros apply whether a contractor or BLM personnel are used. The following stipulations and procedures will be followed to ensure the welfare, safety and humane treatment of the wild horses and burros (WH&B) in accordance with the provisions of 43 CFR 4700.

Gathers are normally conducted for one of the following reasons:

1. Regularly scheduled gathers to obtain or maintain the Appropriate Management Level (AML).

2. Drought conditions that could cause mortality to WH&B due to the absence of water or forage, and where continued grazing may result in a downward trend to the vegetative communities due to plant mortality and reduced vigor and productiveness.

3. Fires that remove forage to the extent that there is inadequate forage to sustain the population or to allow recovery of native vegetation.

4. Utilization levels that reach a point where a continued increase in utilization would cause a downward trend in the plant communities and impede meeting standards for rangeland health.

5. Monitoring indicates that WH&B use would begin to cause a downward trend in riparian function or not permit the recovery of riparian vegetation determined to be in undesirable condition.

A. CAPTURE METHODS USED IN THE PERFORMANCE OF A GATHER - Contract Operations

1. Helicopter - Drive Trapping

   Capture attempts may be accomplished by utilizing a helicopter to drive animals into a temporary trap. If this method is selected the following applies:

   a. A minimum of two saddle-horses shall be immediately available at the trap site to accomplish roping if necessary. Roping shall be done as determined by the BLM. Under no circumstances shall animals be tied down for more than one hour.
   b. The contractor shall assure that bands remain together, and that foals shall not be left behind.

c. A domestic saddle horse(s) may be used as prada (or "Judas") horse to lead the wild horses into the trap site. Individual ground hazers may also be used to assist in the gather.

2. Helicopter - Roping

Capture attempts may be accomplished by utilizing a helicopter to drive animals to ropers. If this method is selected the following applies:

a. Under not circumstances shall animals be tied down for more than one hour.

b. The contractor shall assure that bands remain together, and that foals shall not be left behind.

B. BLM Conducted Gather - Non-Contract Operations

1. Gather operations will be conducted in conformance with the Wild Horse and Burro Aviation Management Handbook (March 2000).

2. Two-way radio communication between the helicopter and the ground crew will be maintained at all times during the operation.

C. Safety and Communications

1. The Contractor shall have the means to communicate with the BLM and all contractor personnel engaged in the capture of wild horses and burros utilizing a VHF/FM Transceiver or VHF/FM portable Two-Way radio. If communications are ineffective the government will take steps necessary to protect the welfare of the animals.

a. The proper operation, service and maintenance of all contractor furnished property is the responsibility of the Contractor. The BLM reserves the right to remove from service any contractor personnel or contractor furnished equipment which, in the opinion of the BLM violate contract rules, are unsafe or otherwise unsatisfactory. In this event, the Contractor will be notified in writing to furnish replacement personnel or equipment within 48 hours of notification. All such replacements must be approved in advance of operation by the BLM.

b. The Contractor shall obtain the necessary FCC licenses for the radio system.

c. All accidents occurring during the performance of any delivery order shall be immediately reported to the BLM.

2. Should the helicopter be employed, the following will apply:

a. The Contractor must operate in compliance with Federal Aviation Regulations, Part 91. Pilots provided by the Contractor shall comply with the Contractor's Federal Aviation Certificates, applicable regulations of the State in which the gather is located.

b. Fueling operations shall not take place within 1,000 feet of the animals.

c. At time of delivery order completion, the contractor shall provide the BLM with a completed copy of the Service Contract Flight Hour Report.

D. Trapping and Care

1. The primary concern of the contractor is the safe and humane handling of all animals captured. All capture attempts shall incorporate the following:

   a. All trap and holding facilities locations must be approved by the BLM prior to construction. The Contractor may also be required to change or move trap locations as determined by the BLM. All traps and holding facilities not located on public land must have prior written approval of the landowner.

   b. A cultural resources investigation by an archaeologist or an archaeological technician would be conducted prior to trap or holding facility construction. If cultural values are found, an alternative site would be selected.

   c. Prior to facility (temporary traps and holding corrals) construction, the proposed locations would be examined for the presence of noxious weeds. If it is determined that noxious weeds are present, the contractor would be instructed to locate the facilities elsewhere. The contractor and his personnel would also be instructed to avoid camping in or driving through noxious weed infestations.

2. The rate of movement and distance the animals travel shall not exceed limitations set by the BLM who will consider terrain, physical barriers, weather, condition of the animals and others factors.

3. All traps, wings, and holding facilities shall be constructed, maintained and operated to handle the animals in a safe and humane manner and be in accordance with the following:

   a. Traps and holding facilities shall be constructed of portable panels, the top of which shall not be less than 72 inches high for horses

and 60 inches for burros, and the bottom rail of which shall not be more than 12 inches from ground level. All traps and holding facilities shall be oval or round in design.

b. All loading chute sides shall be a minimum of 6 feet high and shall be fully covered with plywood (without holes) or like material.

c. All runways shall be a minimum of 30 feet long and a minimum of 6 feet high for horses, and 5 feet high for burros, and shall be covered with plywood, burlap, plastic snow fence or like material a minimum of 1 foot to 5 feet above ground level for burros and 1 foot to 6 feet for horses. The location of the government furnished portable restraining chute to restrain, age, or provide additional care for animals shall be placed in the runway in a manner as instructed by or in concurrence with the BLM.

d. All crowding pens including the gates leading to the runways shall be covered with a material which prevents the animals from seeing out (plywood, burlap, etc.) and shall be covered a minimum of 1 foot to 5 feet above ground level for burros and 2 feet to 6 feet for horses. Eight linear feet of this material shall be capable of being removed or let down to provide a viewing window.

e. All pens and runways used for the movement and handling of animals shall be connected with hinged self-locking gates.

4. No fence modifications will be made without authorization from the COR/PI. The Contractor/BLM shall be responsible for restoration of any fence modification.

5. When dust conditions occur within or adjacent to the trap or holding facility, the Contractor/BLM shall be required to wet down the ground with water.

6. Alternate pens, within the holding facility shall be furnished by the Contractor to separate mares or jennies with small foals, sick and injured animals, and estrays from the other animals. Animals shall be sorted as to age, number, size, temperament, sex, and condition when in the holding facility so as to minimize, to the extent possible, injury due to fighting and trampling. Under normal conditions, the government will require that animals be restrained for the purpose of determining an animal's age or other similar practices. In these instances a portable restraining chute will be provided by the government. Alternate pens shall be furnished by the Contractor to hold animals if the specific gathering requires the animals be released back into the capture area(s). In areas requiring one or more

satellite traps, and where a centralized holding facility is utilized, the Contractor may be required to provide additional holding pens to segregate animals transported from remote locations so they may be returned to their traditional ranges. Either segregation or temporary marking and later segregation will be at the discretion of the BLM.

7. The Contractor shall provide animals held in the traps and/or holding facilities with a continuous supply of fresh clean water at a minimum rate of 10 gallons per animal per day. Animals held for 10 hours or more in the traps or holding facilities shall be provided good quality hay at the rate of not less than two pounds of hay per 100 pounds of estimated body weight per day.

8. It is the responsibility of the Contractor/BLM to provide security to prevent loss, injury or death of captured animals until delivery to final destination.

9. The Contractor/BLM shall restrain sick or injured animals if treatment is necessary. A veterinarian may be called to make a diagnosis and final determination. Destruction shall be done by the most humane method available. Authority for humane destruction of wild horses (or burros) is provided by the Wild Free-Roaming Horse and Burro Act of 1971, Section 3(b)(2)(A), 43 CFR 4730.1, BLM Manual 4730 - Destruction of Wild Horses and Burros and Disposal of Remains, and is in accordance with BLM policy as expressed in Instructional Memorandum No. 98-141.

   Any captured horses that are found to have the following conditions may be humanely destroyed:

   a. The animal shows a hopeless prognosis for life.
   b. Suffers from a chronic disease.
   c. Requires continuous care for acute pain and suffering.
   d. Not capable of maintaining a body score of one.
   e. The animal is a danger to itself or others.

10. Animals shall be transported to final destination from temporary holding facilities within 24 hours after capture unless prior approval is granted by the BLM for unusual circumstances. Animals to be released back into the HMA following gather operations may be held up to 21 days or as directed by the BLM. Animals shall not be held in traps and/or temporary holding facilities on days when there is no work being conducted except as specified by the BLM. The Contractor shall schedule shipments of animals to arrive at final destination between 7:00 a.m. and 4:00 p.m. No shipments shall be scheduled to arrive at final destination on Sunday and Federal holidays, unless prior approval has been obtained by the BLM.

Animals shall not be allowed to remain standing on trucks while not in transport for a combined period of greater than three (3) hours. Animals that are to be released back into the capture area may need to be transported back to the original trap site. This determination will be at the discretion of the BLM.

11. The BLM will issue a Notice of Intent to Impound Unauthorized Livestock prior to all gathers. Branded or privately owned animals whose owners are known will be impounded by BLM, and if not redeemed by payment of trespass and capture fees, will be sold at public auction. If owners are not known, the private animals will be turned over to the State for Processing under Nevada estray laws.

E. Motorized Equipment

1. All motorized equipment employed in the transportation of captured animals shall be in compliance with appropriate State and Federal laws and regulations applicable to the humane transportation of animals. The Contractor shall provide the BLM with a current safety inspection (less than one year old) for all motorized equipment and tractor-trailers used to transport animals to final destination.

2. All motorized equipment, tractor-trailers, and stock trailers shall be in good repair, of adequate rated capacity, and operated so as to ensure that captured animals are transported without undue risk or injury.

3. Only tractor-trailers or stock trailers with a covered top shall be allowed for transporting animals from trap site(s) to temporary holding facilities, and from temporary holding facilities to final destination(s). Sides or stock racks of all trailers used for transporting animals shall be a minimum height of 6 feet 6 inches from the floor. Single deck tractor-trailers 40 feet or longer shall have two (2) partition gates providing three (3) compartments within the trailer to separate animals. Tractor-trailers less than 40 feet shall have at least one partition gate providing two (2) compartments within the trailer to separate the animals. Compartments in all tractor-trailers shall be of equal size plus or minus 10 percent. Each partition shall be a minimum of 6 feet high and shall have a minimum 5 foot wide swinging gate. The use of double deck tractor-trailers is unacceptable and shall not be allowed.

4. All tractor-trailers used to transport animals to final destination(s) shall be equipped with at least one (1) door at the rear end of the trailer which is capable of sliding either horizontally or vertically. The rear door(s) of tractor-trailers and stock trailers must be capable of opening the full width of the trailer. Panels facing the inside of all trailers must be free of sharp

edges or holes that could cause injury to the animals. The material facing the inside of all trailers must be strong enough so that the animals cannot push their hooves through the side. Final approval of tractor-trailers and stock trailers used to transport animals shall be held by the BLM.

5. Floors of tractor-trailers, stock trailers, and the loading chute shall be covered and maintained with wood shavings to prevent the animals from slipping.

6. Animals to be loaded and transported in any vehicle or trailer shall be as directed by the BLM and may include limitations on numbers according to age, size, sex, temperament, and animal condition. The following minimum square feet per animal shall be allowed in all trailers:

   11 sq. ft. per adult horse (1.4 linear ft. in an 8ft. wide trailer);
   6 sq. ft. per horse foal (.75 linear ft. in an 8ft. wide trailer).

7. Prior to any gathering operations, the BLM will provide for a pre-capture evaluation of existing conditions in the gather areas. The evaluation will include animal condition, prevailing temperatures, drought conditions, soil conditions, road conditions, and a topographic map with location of fences, other physical barriers, and acceptable trap locations in relation to animal distribution. The evaluation will determine the level of activity likely to cause undue stress to the animals, and whether such stress would necessitate a veterinarian be present. If it is determined that capture efforts necessitate the services of a veterinarian, one would be obtained before capture would proceed. The Contractor will be informed of all the conditions and will be given directions regarding the capture and handling of animals to ensure their health and welfare is protected.

8. If the BLM determines that dust conditions are such that animals could be endangered during transportation, the Contractor will be instructed to adjust speed.

9. Trap sites will be located to cause as little injury and stress to the animals, and as little damage to the natural resources of the area, as possible. Sites will be located on or near existing roads. Additional trap sites may be required, as determined by the BLM, to relieve stress caused by specific conditions at the time of the gather (i.e. dust, rocky terrain, temperatures, etc.).

F. Animal Characteristics and Behavior

Releases of wild horses would be near available water. If the area is new to them, a short-term adjustment period may be required while the wild horses become familiar with the new area.

G. Public Participation

It is BLM policy that the public will not be allowed to come into direct contact with wild horses or burros being held in BLM facilities. Only BLM personnel, or contractors may enter the corrals or directly handle the animals. The general public may not enter the corrals or directly handle the animals at anytime or for any reason during BLM operations.

H. Responsibility and Lines of Communication

ELY

Contracting Officer's Representatives

Jared Bybee
Alan Shepherd

Project Inspectors
Mike Perkins
Paul Podborny

The Contracting Officer's Representatives (CORs) and the project inspectors (PIs) have the direct responsibility to ensure the Contractor's compliance with the contract stipulations. The Ely Assistant Field Manager for Renewable Resources and the Ely Field Manager will take an active role to ensure the appropriate lines of communication are established between the field, Field Office, State Office, National Program Office, and PVC Corral offices. All employees involved in the gathering operations will keep the best interests of the animals at the forefront at all times.

All publicity, formal public contact and inquiries will be handled through the Assistant Field Manager for Renewable Resources. This individual will be the primary contact and will coordinate the contract with the PVC Corrals to ensure animals are being transported from the capture site in a safe and humane manner and are arriving in good condition.

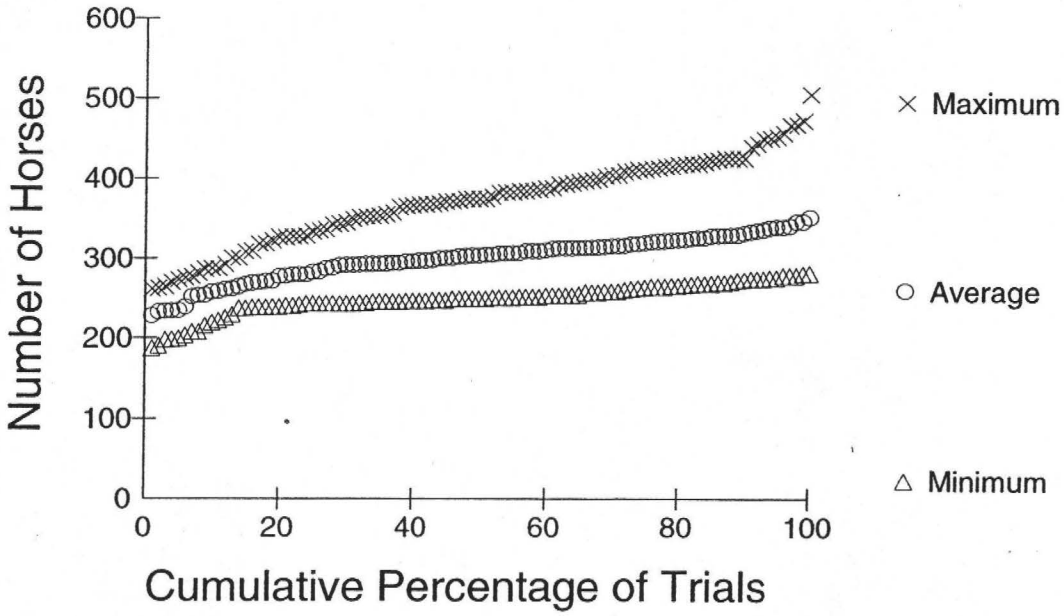
The contract specifications require humane treatment and care of the animals during removal operations. These specifications are designed to minimize the risk of injury and death during and after capture of the animals. The specifications will be vigorously enforced.

Should the Contractor show negligence and/or not perform according to contract stipulations, he will be issued written instructions, stop work orders, or defaulted.

APPENDIX II
POPULATION MODELING

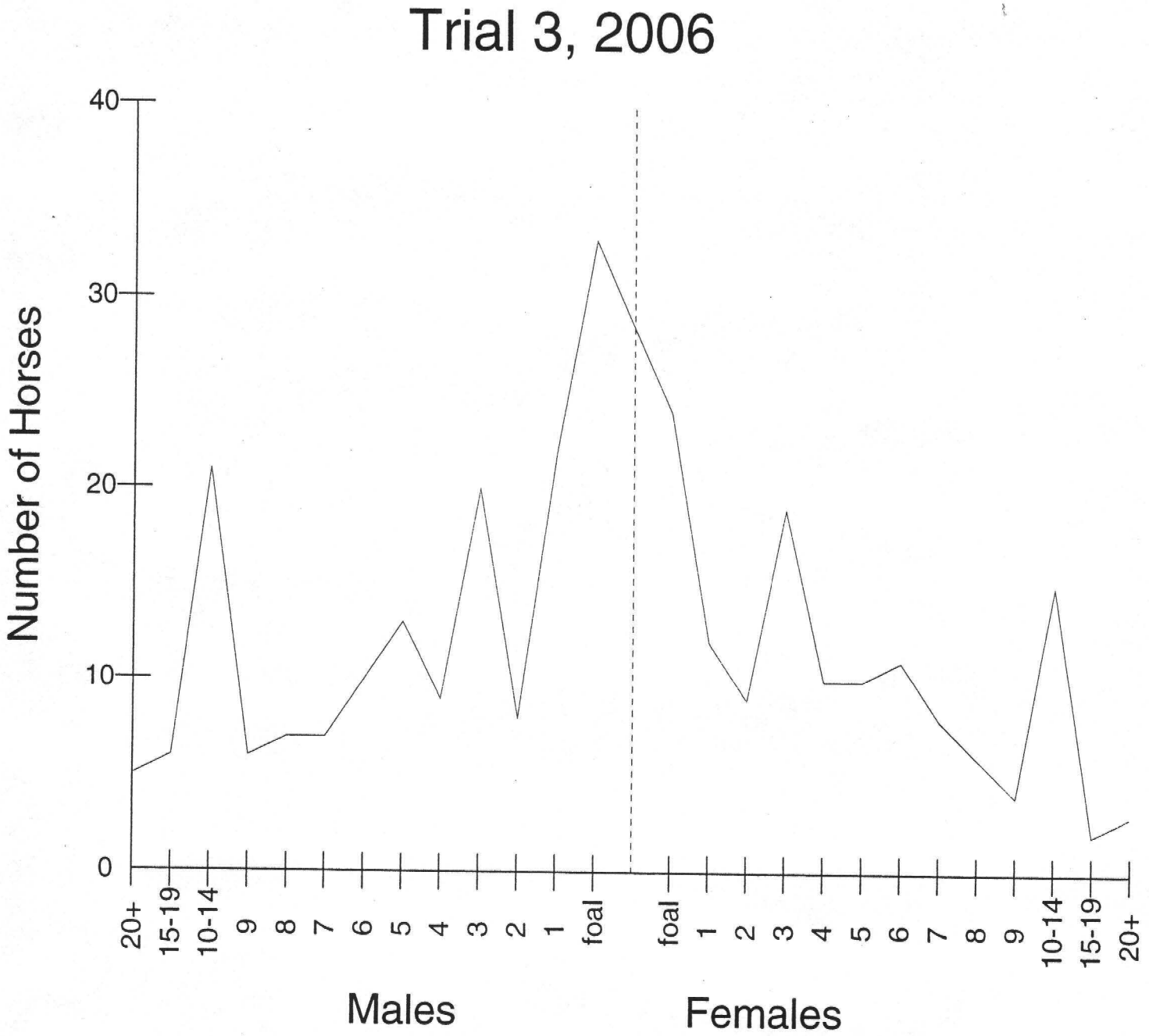
PROPOSED ACTION

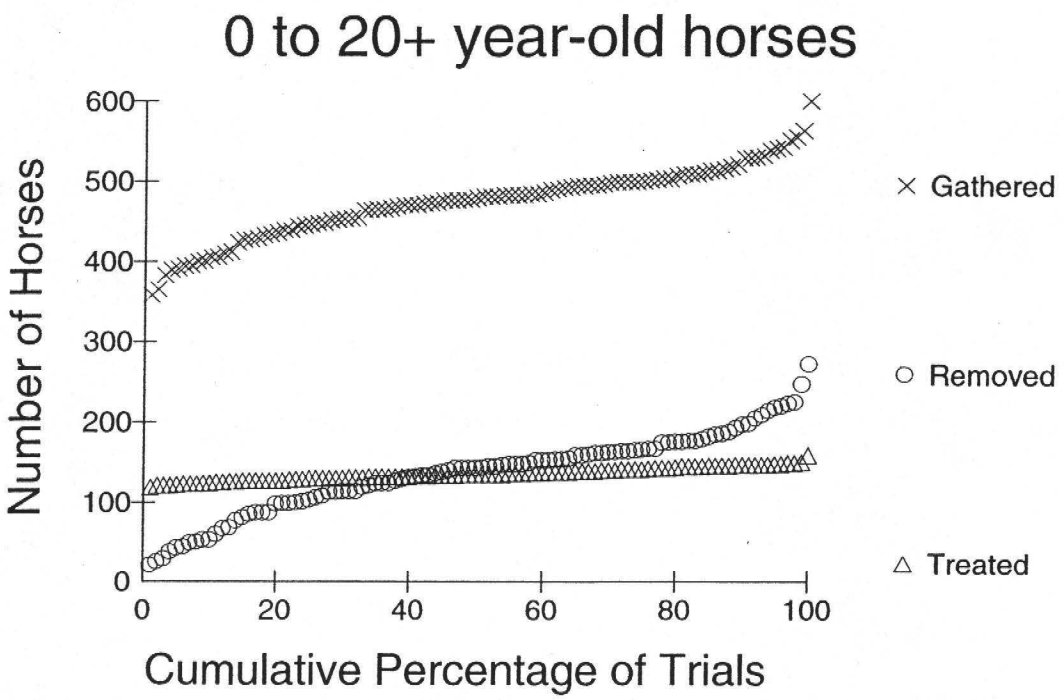
0 to 20+ year-old horses



	Population Sizes in 5 Years*		
	Minimum	Average	Maximum
Lowest Trial	187	227	261
10th Percentile	220	258	287
25th Percentile	243	283	334
Median Trial	249	304	374
75th Percentile	264	320	412
90th Percentile	274	332	432
Highest Trial	281	352	505

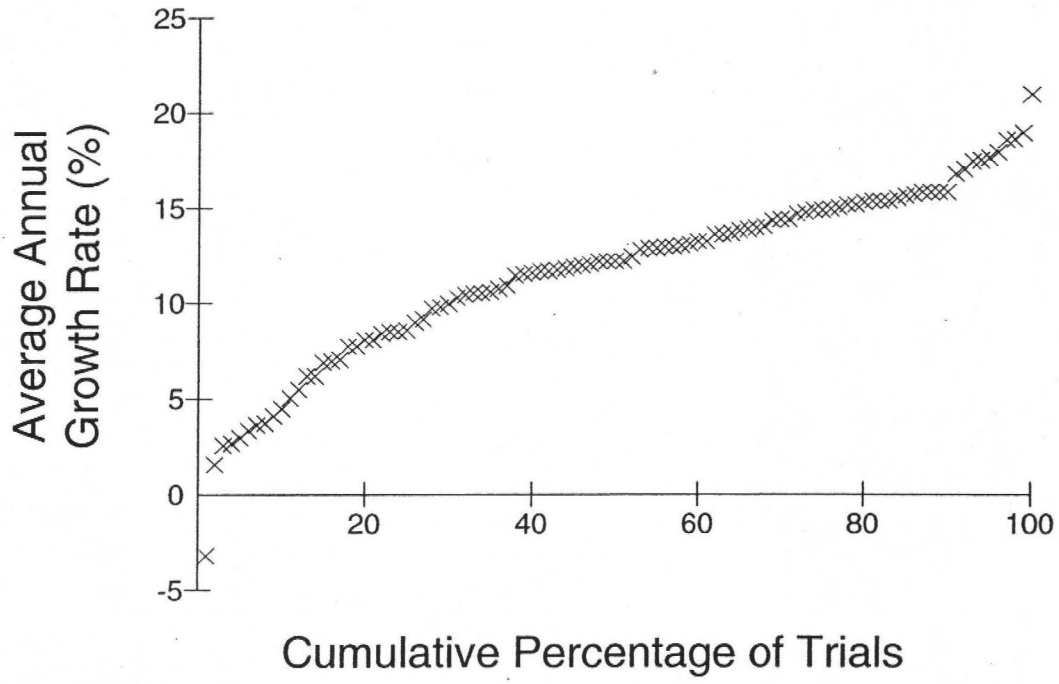
* 0 to 20+ year-old horses


Trial 3, 2006
Number of Horses
40
30
20
10
0
20+
15-19
10-14
9
8
7
6
5
4
3
2
1
foal
foal
1
2
3
4
5
6
7
8
9
10-14
15-19
20+
Males
Females



	Totals in 5 Years*		
	Gathered	Removed	Treated
Lowest Trial	358	21	119
10th Percentile	406	56	124
25th Percentile	447	104	130
Median Trial	480	144	135
75th Percentile	500	166	142
90th Percentile	529	198	147
Highest Trial	600	272	159

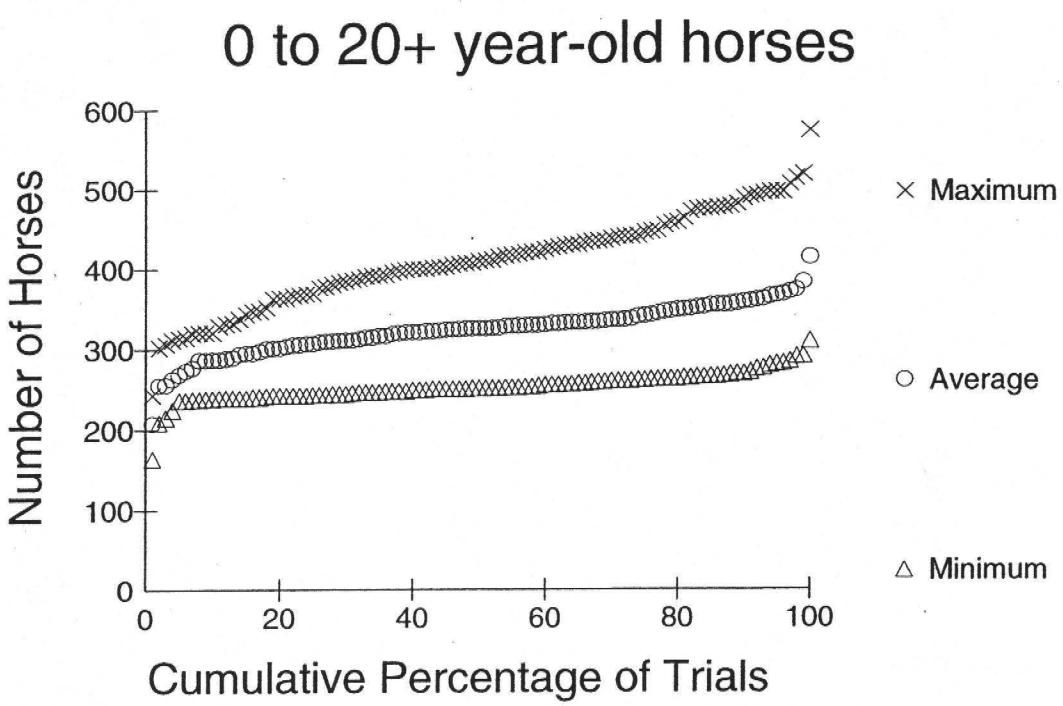
* 0 to 20+ year-old horses



Average Growth Rate in 4 Years

Lowest Trial	-3.2%
10th Percentile	4.7%
25th Percentile	8.8%
Median Trial	12.2%
75th Percentile	14.9%
90th Percentile	16.3%
Highest Trial	20.9%

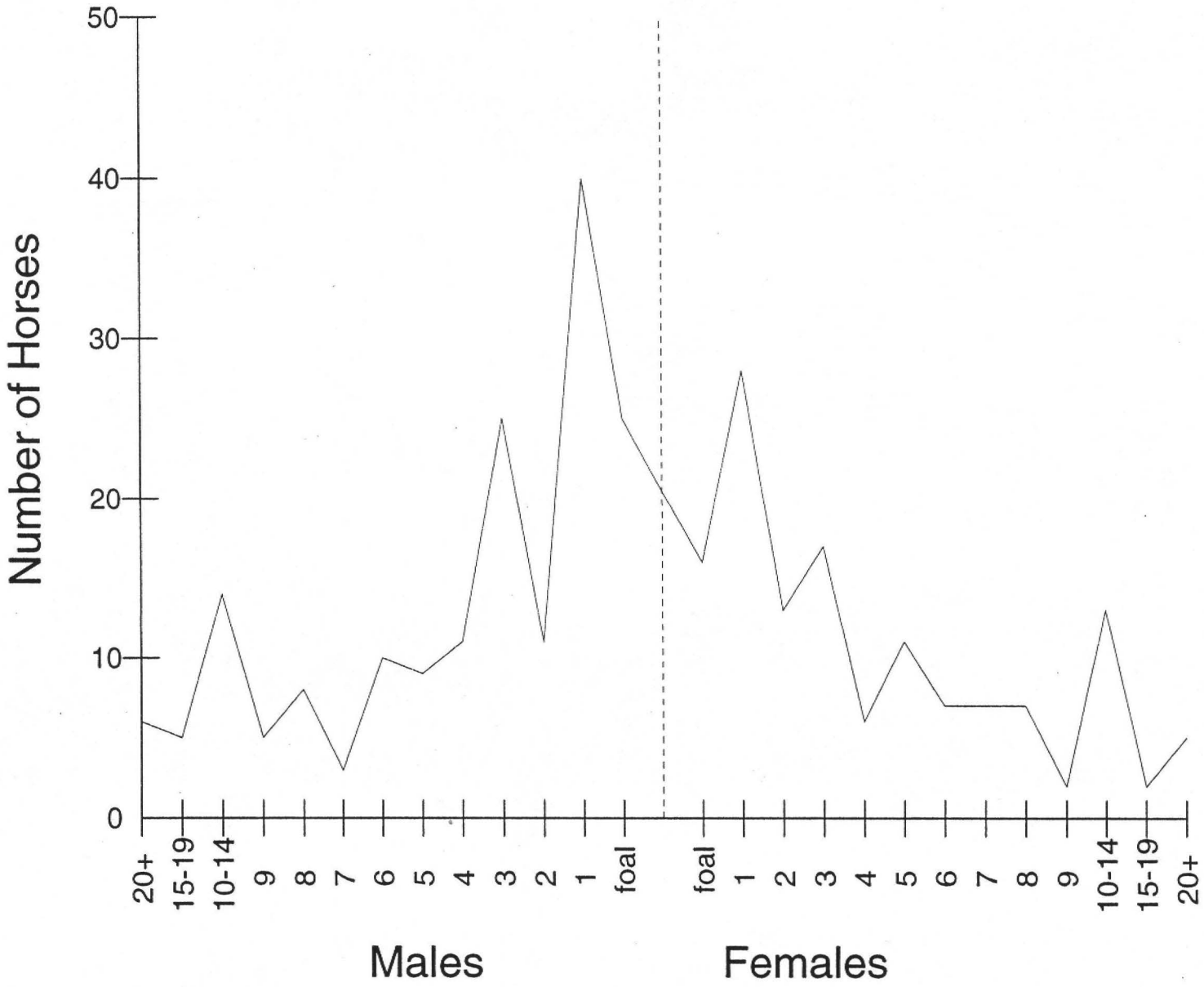
ALTERNATIVE ONE



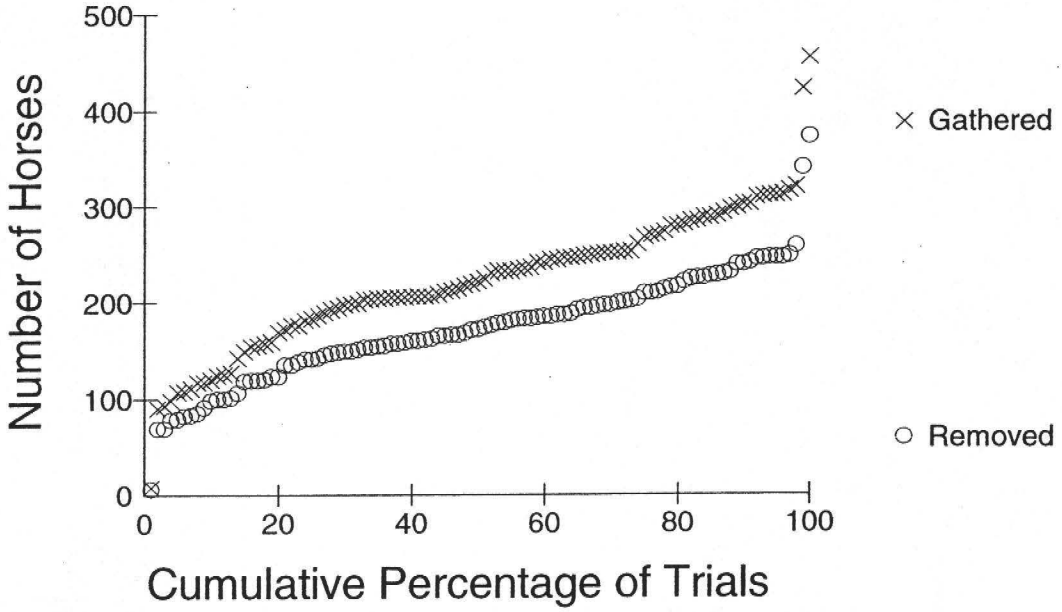
	Population Sizes in 5 Years*		
	Minimum	Average	Maximum
Lowest Trial	164	207	243
10th Percentile	238	286	324
25th Percentile	243	307	372
Median Trial	251	325	410
75th Percentile	262	341	446
90th Percentile	270	358	490
Highest Trial	309	414	573

* 0 to 20+ year-old horses

Trial 4, 2006

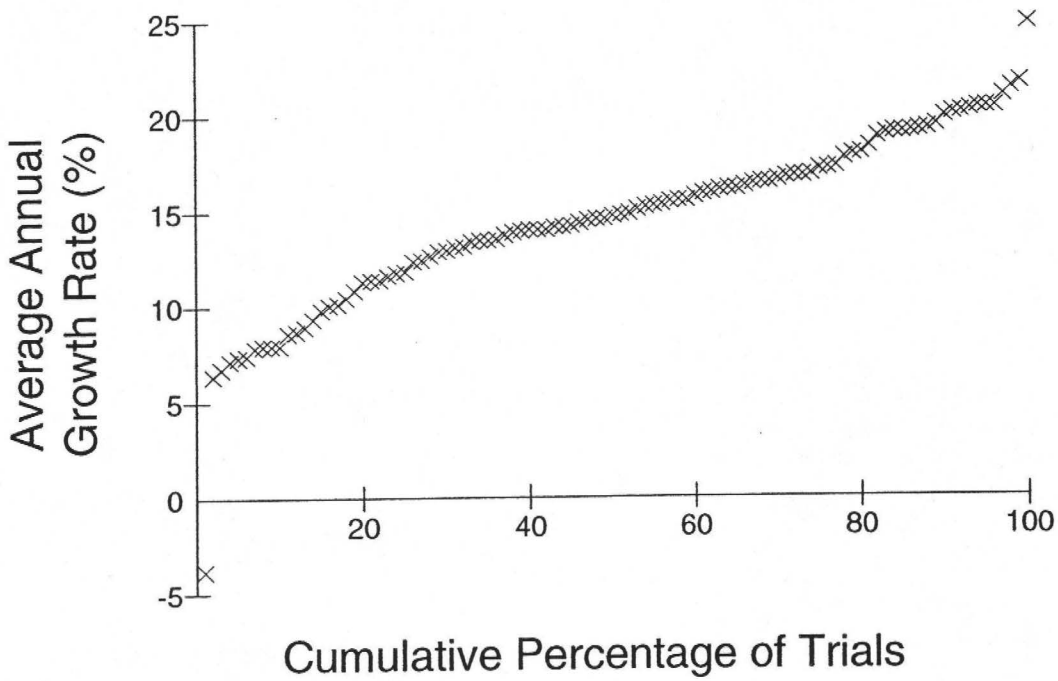

Number of Horses
50
40
30
20
10
0
20+
15-19
10-14
9
8
7
6
5
4
3
2
1
foal
foal
1
2
3
4
5
6
7
8
9
10-14
15-19
20+
Males
Females

0 to 20+ year-old horses



	Totals in 5 Years*	
	Gathered	Removed
Lowest Trial	8	6
10th Percentile	122	99
25th Percentile	184	142
Median Trial	222	173
75th Percentile	268	209
90th Percentile	302	240
Highest Trial	454	372

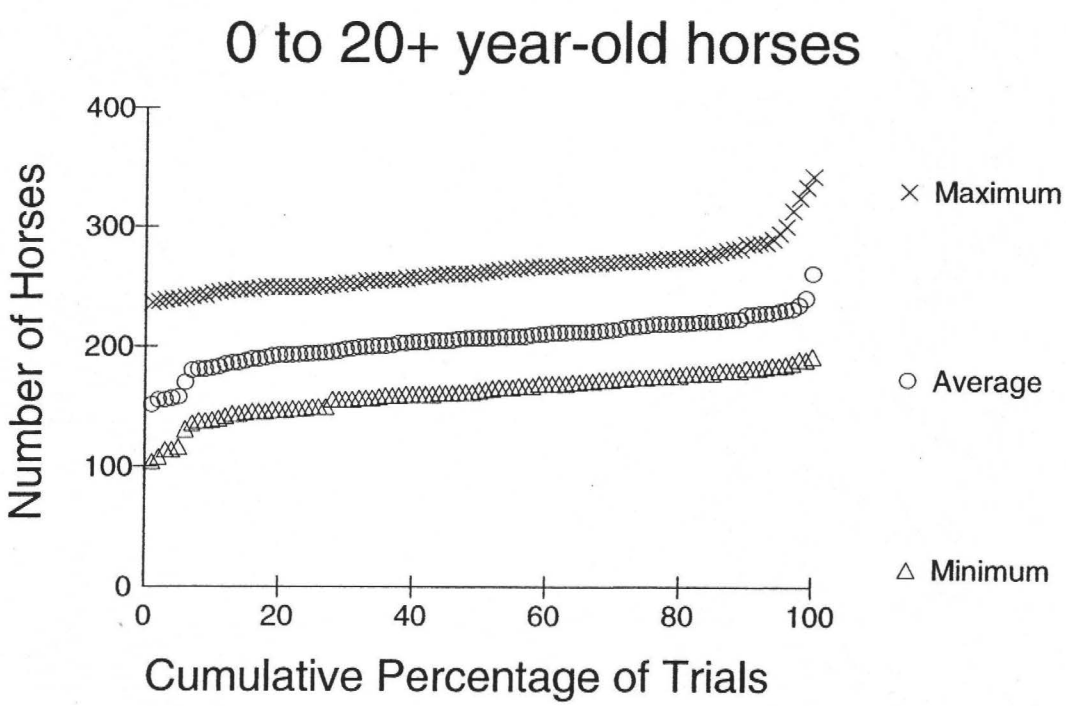
* 0 to 20+ year-old horses



Average Growth Rate in 4 Years

Lowest Trial	-3.8%
10th Percentile	8.2%
25th Percentile	12.1%
Median Trial	14.8%
75th Percentile	17.2%
90th Percentile	20.0%
Highest Trial	24.8%

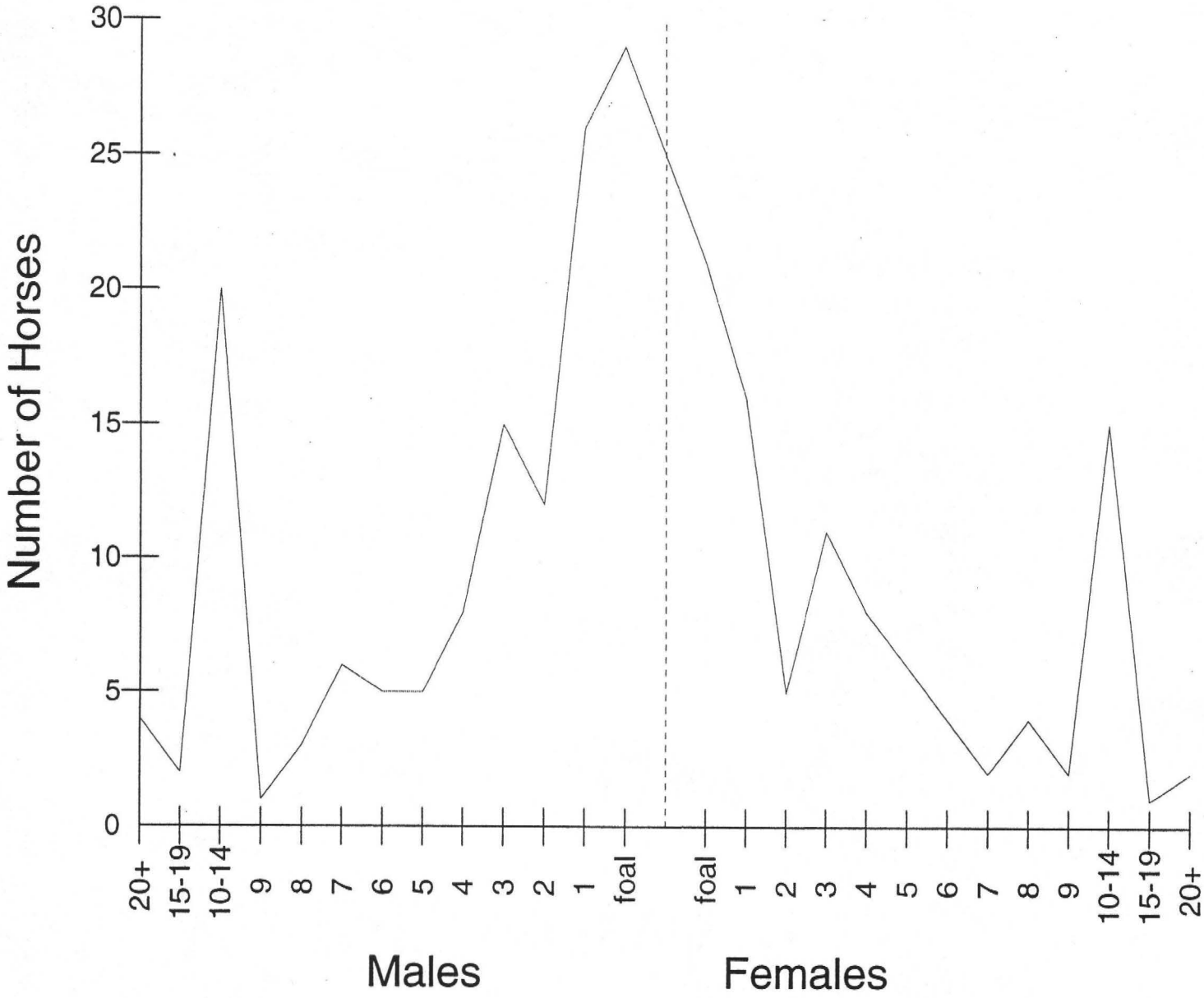
ALTERNATIVE TWO

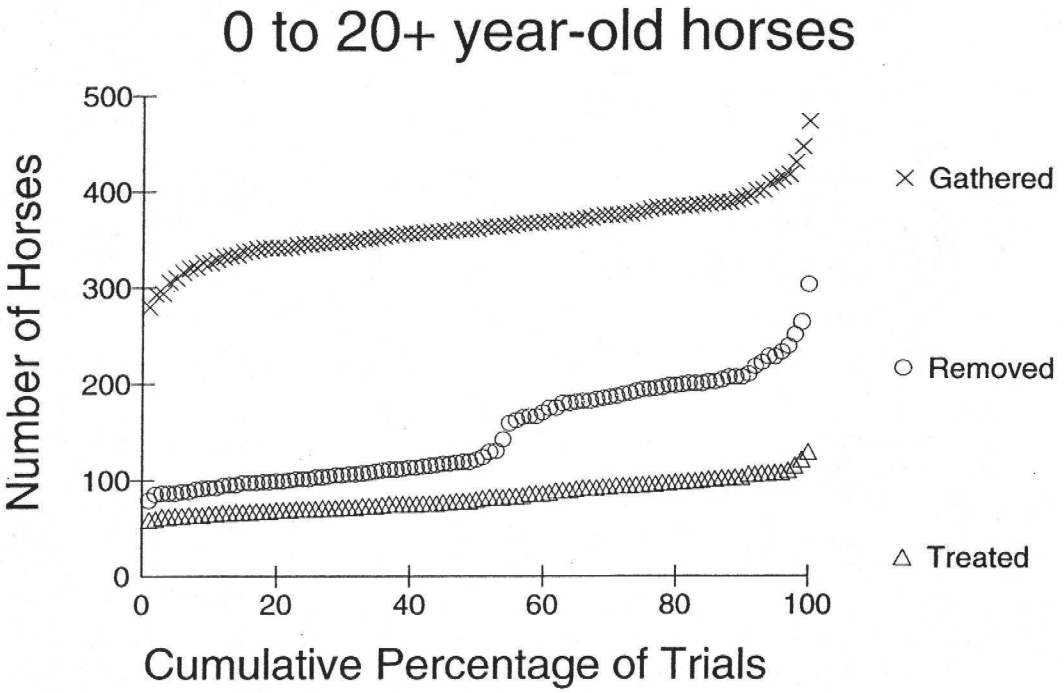


	Population Sizes in 5 Years*		
	Minimum	Average	Maximum
Lowest Trial	104	151	236
10th Percentile	140	182	244
25th Percentile	150	194	250
Median Trial	164	206	262
75th Percentile	174	218	272
90th Percentile	182	226	285
Highest Trial	192	260	342

* 0 to 20+ year-old horses

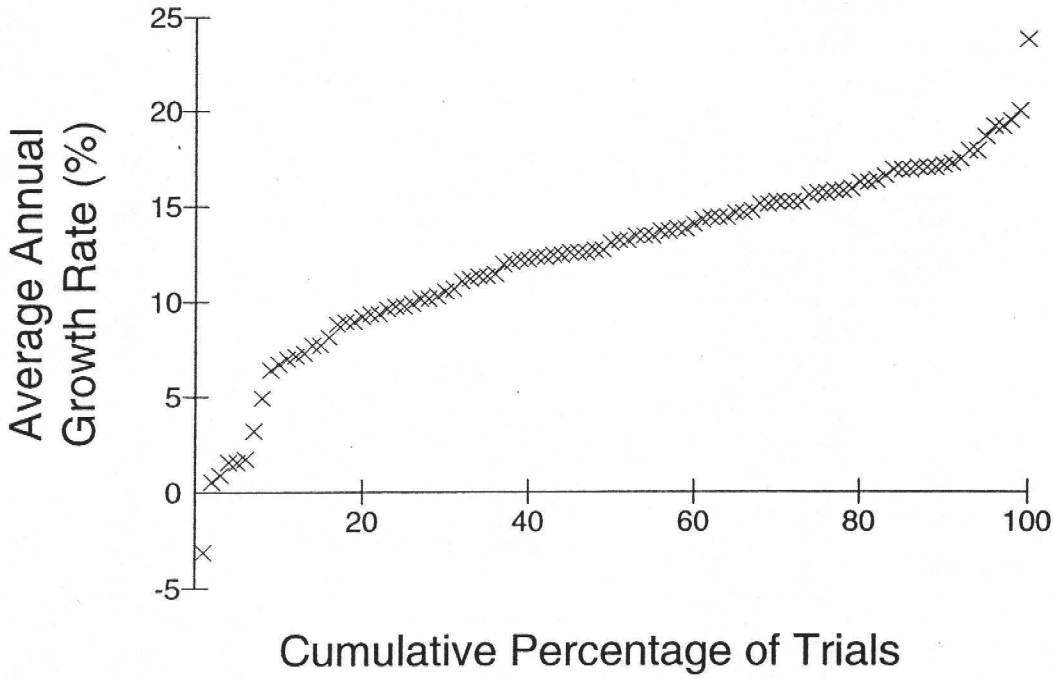
Trial 17, 2006





	Totals in 5 Years*		
	Gathered	Removed	Treated
Lowest Trial	280	79	59
10th Percentile	328	92	65
25th Percentile	346	102	70
Median Trial	362	122	80
75th Percentile	380	194	96
90th Percentile	394	208	104
Highest Trial	472	303	129

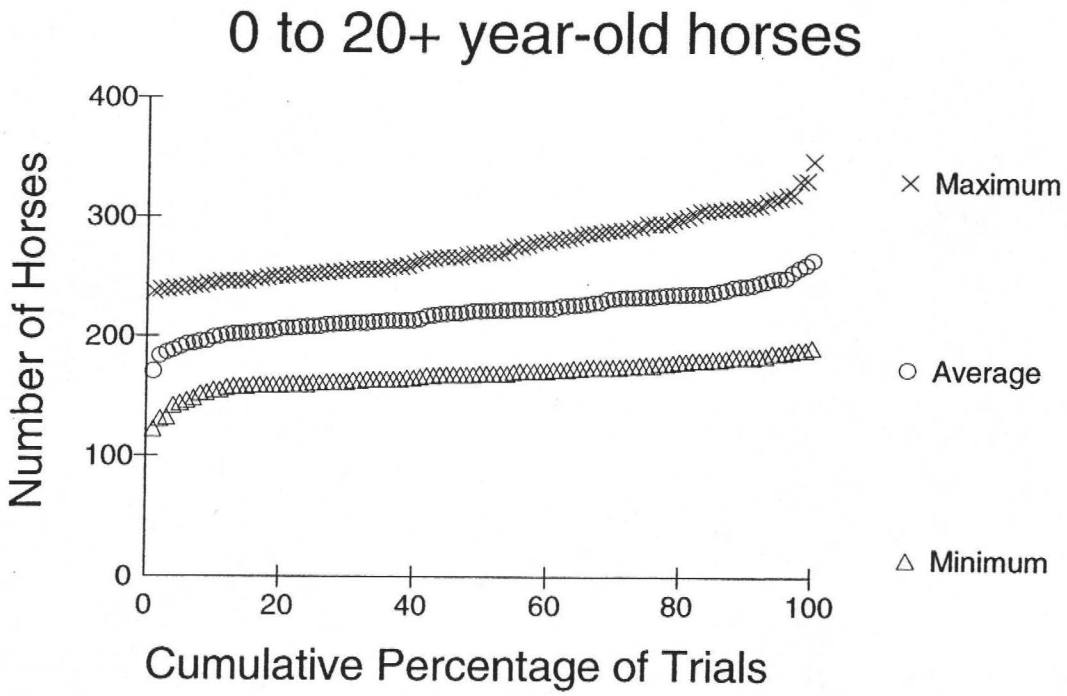
* 0 to 20+ year-old horses



Average Growth Rate in 4 Years

Lowest Trial	-3.1%
10th Percentile	6.8%
25th Percentile	9.8%
Median Trial	13.1%
75th Percentile	15.6%
90th Percentile	17.2%
Highest Trial	23.7%

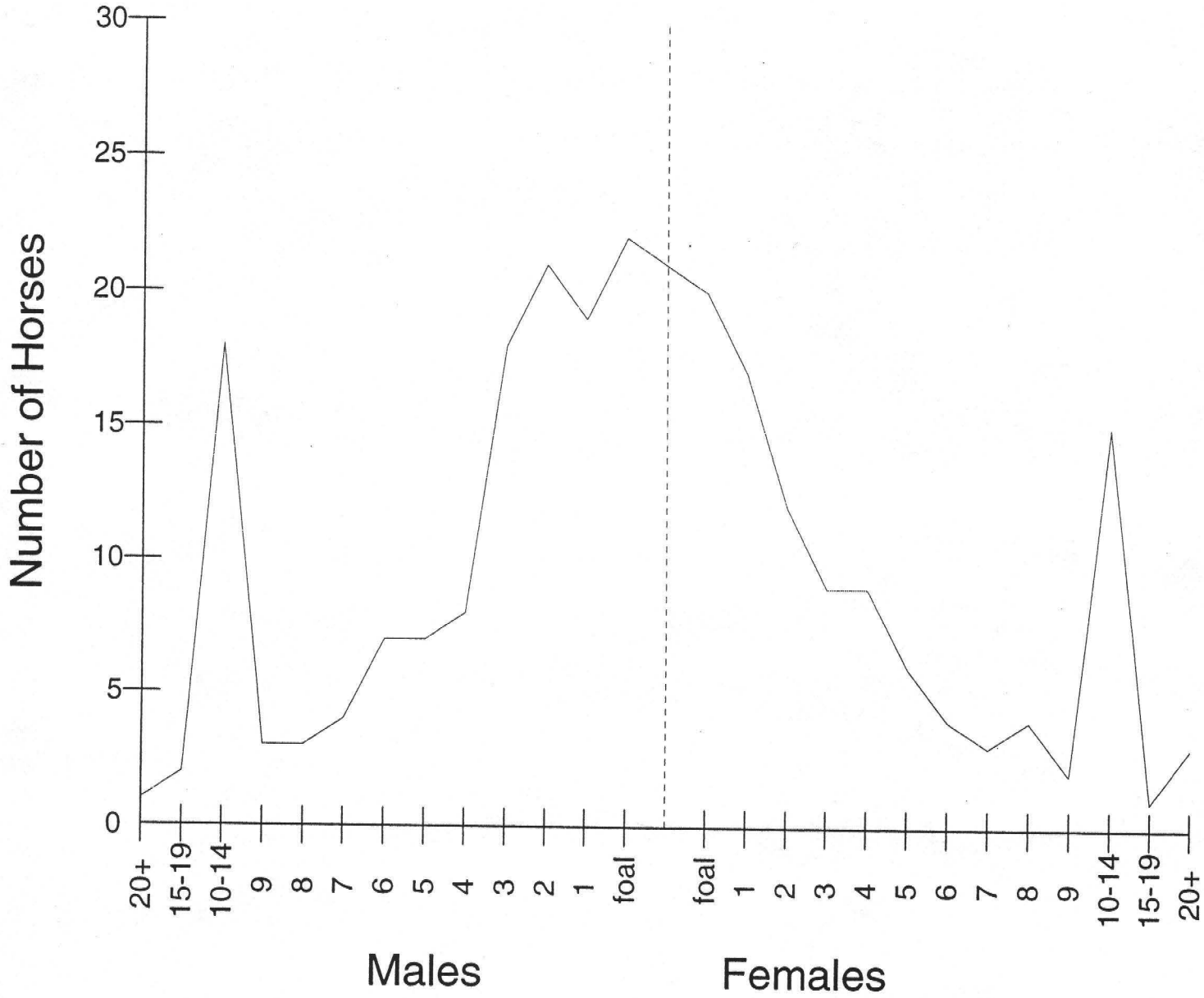
ALTERNATIVE THREE

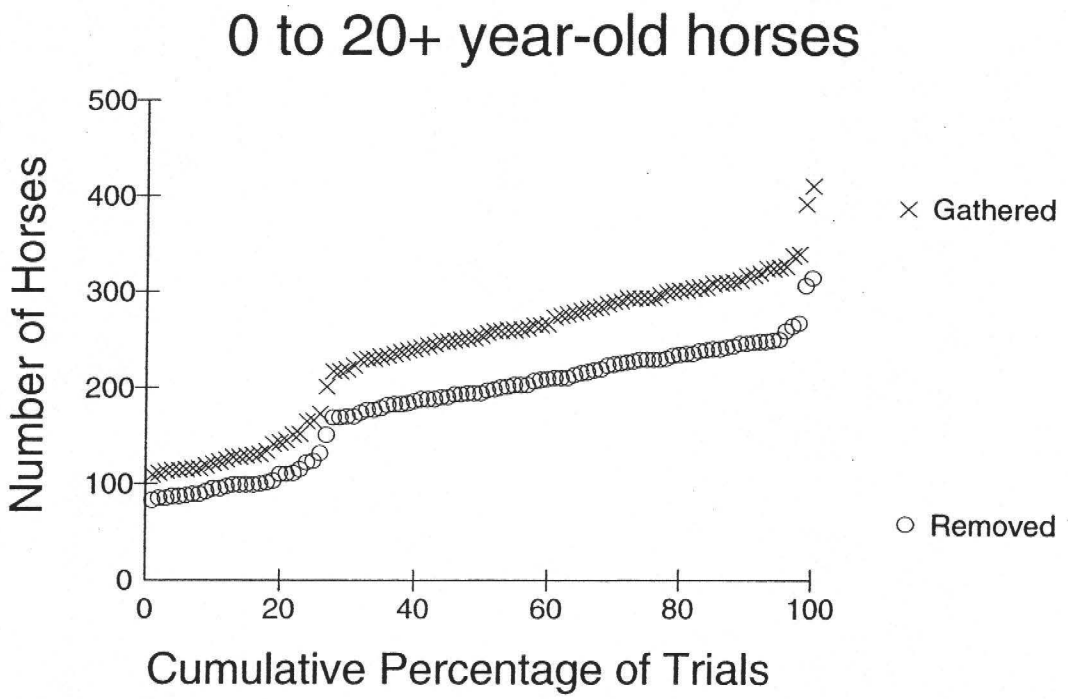


	Population Sizes in 5 Years*		
	Minimum	Average	Maximum
Lowest Trial	122	170	237
10th Percentile	155	199	245
25th Percentile	161	208	252
Median Trial	169	221	270
75th Percentile	176	233	294
90th Percentile	183	243	309
Highest Trial	191	264	347

* 0 to 20+ year-old horses

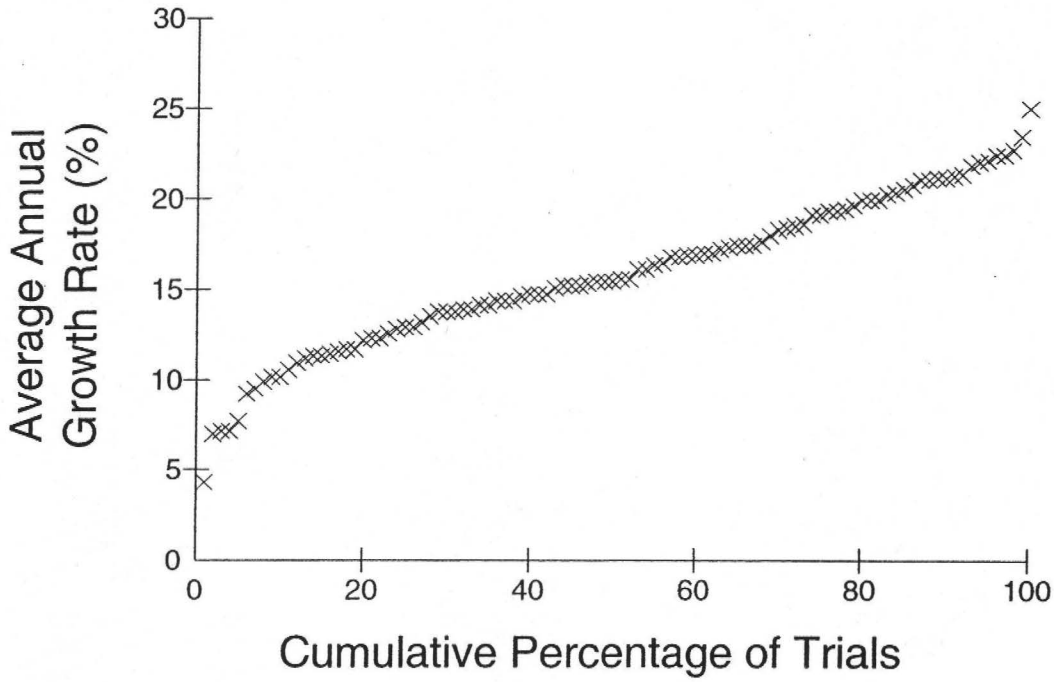
Trial 26, 2006





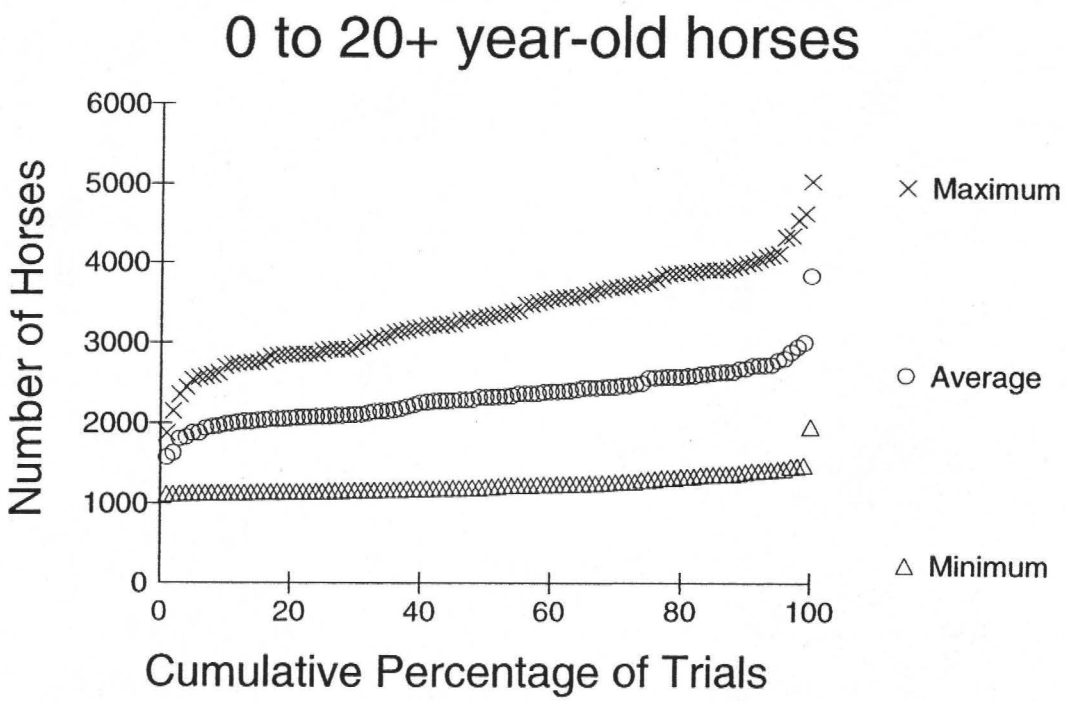
	Totals in 5 Years*	
	Gathered	Removed
Lowest Trial	109	83
10th Percentile	122	95
25th Percentile	170	128
Median Trial	256	196
75th Percentile	293	229
90th Percentile	316	246
Highest Trial	410	314

* 0 to 20+ year-old horses



	Average Growth Rate in 4 Years
Lowest Trial	4.3%
10th Percentile	10.3%
25th Percentile	12.9%
Median Trial	15.5%
75th Percentile	19.2%
90th Percentile	21.2%
Highest Trial	25.0%

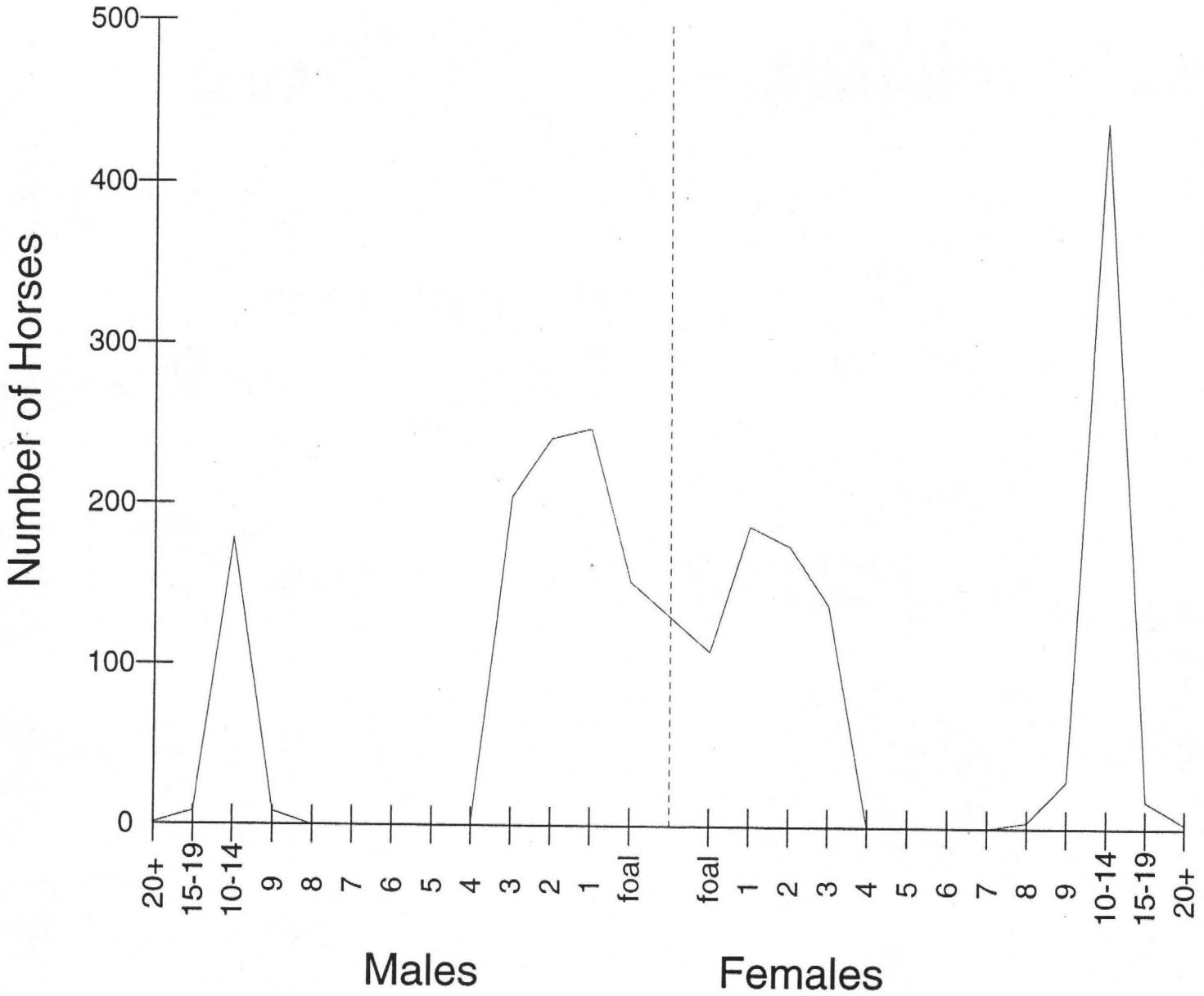
NO ACTION ALTERNATIVE

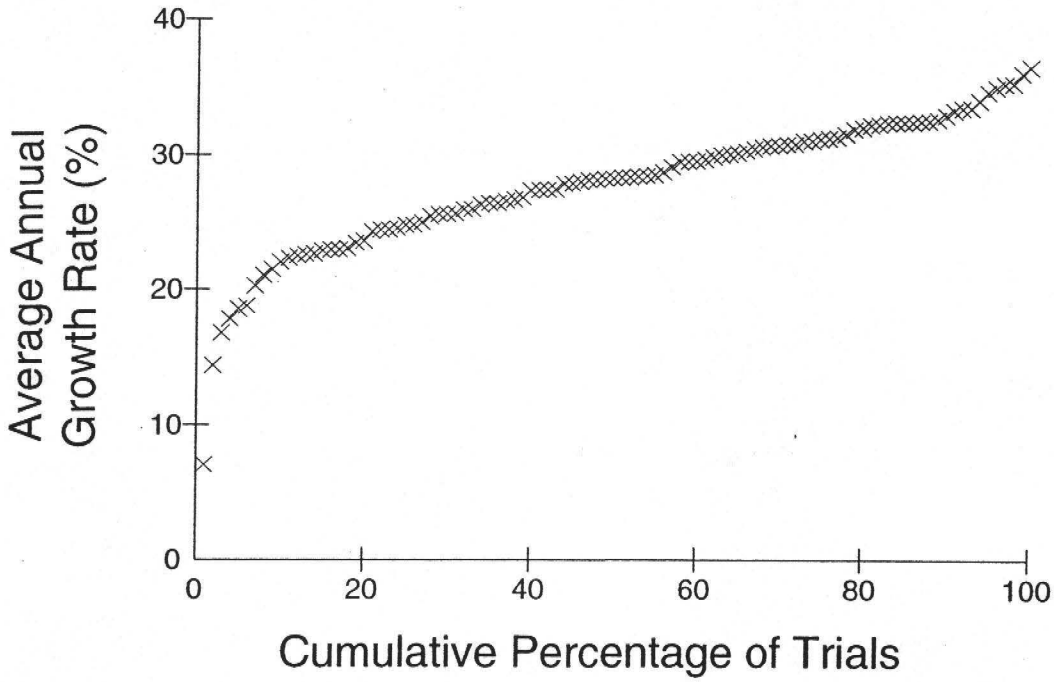


	Population Sizes in 5 Years*		
	Minimum	Average	Maximum
Lowest Trial	1117	1573	1873
10th Percentile	1134	1984	2708
25th Percentile	1152	2077	2898
Median Trial	1204	2318	3322
75th Percentile	1299	2554	3768
90th Percentile	1401	2690	3996
Highest Trial	1960	3832	5029

* 0 to 20+ year-old horses

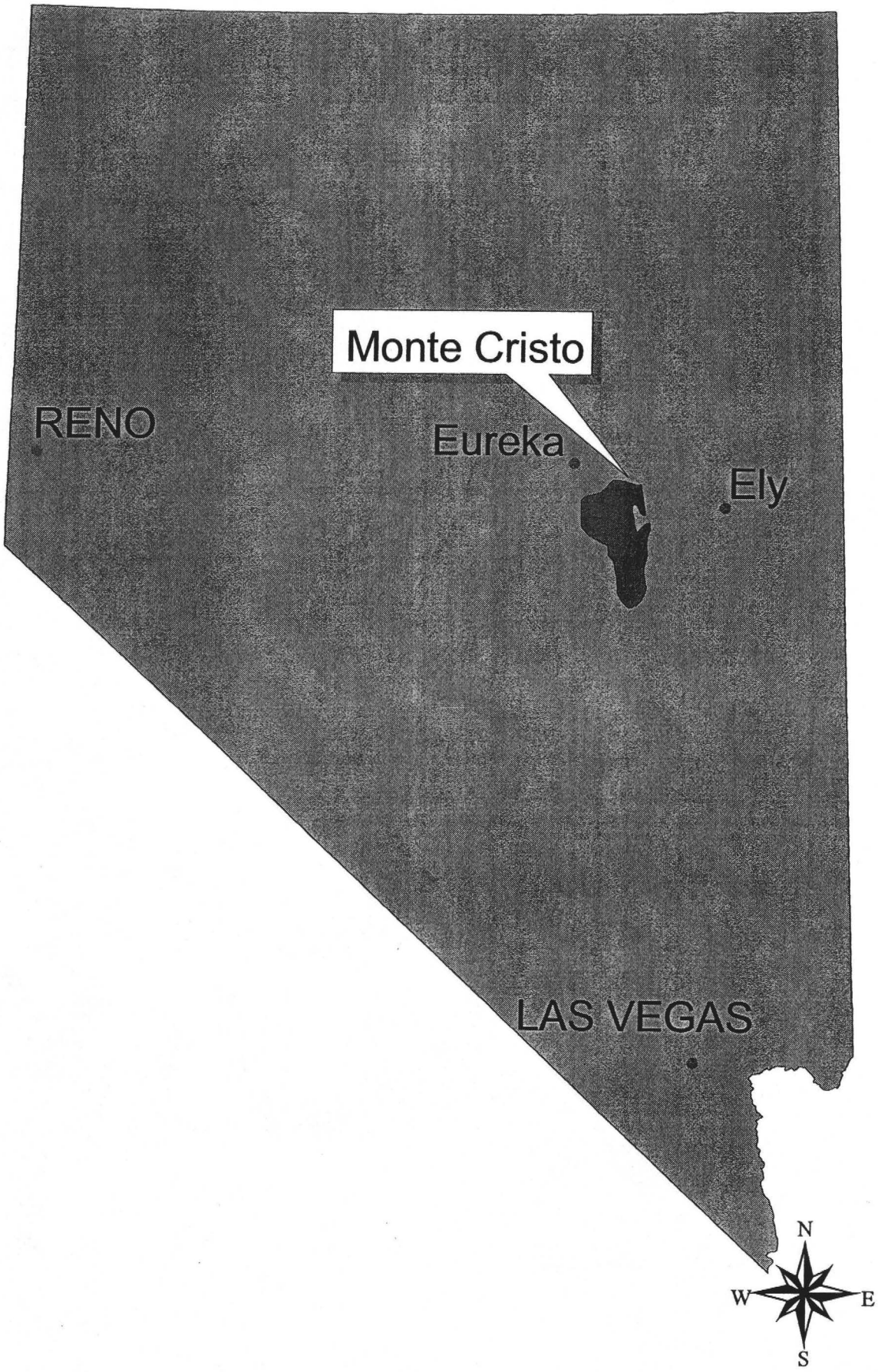
Trial 32, 2006





	Average Growth Rate in 4 Years
Lowest Trial	7.1%
10th Percentile	22.2%
25th Percentile	24.8%
Median Trial	28.3%
75th Percentile	31.2%
90th Percentile	33.1%
Highest Trial	36.5%

Monte Cristo HMA/Terrritory Location



Monte Cristo Gather Project Area