



Ranch Comprehensive Management Plan Update

November 2014

Welcome to the ranch planning workshop! Ranching has a storied history on the Point Reyes peninsula and surrounding lands, and is an important part of the fabric of Point Reyes National Seashore. This *Ranch Comprehensive Management Plan* (Ranch CMP) marks the first time in the Seashore's history that a plan for and about ranching has been undertaken. Through this public process, we are tapping into the expertise and passion of those who have worked the land for generations, and all who care about this spectacular landscape.

A vital component to the success of this plan is open dialogue between the park, park ranchers, park stakeholders and other interested parties. Towards that end, over the last several months the park planning team has participated in some fifty meetings with park ranchers and twenty-five meetings with an array of community groups and other interested parties. All of these meetings have deepened our understanding of the complexities of ranching operations, and the wide range of public interests.

While two of the overarching objectives of this process are to enable the park to issue 20 year ranch permits and to devise an effective management strategy for tule elk affecting ranch lands, we believe it can do more. The purpose of these workshops is to discuss what we have heard to date, solicit further thought and discussion on the most important issues raised by both park ranchers and the public through the scoping process, and lay out the next steps. In addition to the two workshops, a brief comment period—November 17–26—will be open to gather additional comments. Through these community workshops, we hope to foster a constructive dialog focused on some of the most critical issues that have emerged. Your ideas will both inform and shape the range of alternatives presented this coming summer in the ranch plan.

We face complex issues in preserving the many vital natural and cultural resources protected in this extraordinary unit of the national park system. We believe the ranch plan is an exceptional opportunity to strengthen both the historic working ranches and the superlative natural resources of Point Reyes National Seashore. Our hope is that this conversation forges a new level of understanding and collaboration. We are thankful for your participation.



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A handwritten signature in black ink, reading "Cicely A. Muldoon".

Cicely A. Muldoon
Superintendent

Purpose and Need for Action

PURPOSE

The purpose of this plan is to establish a comprehensive framework for the management of existing ranch lands administered by Point Reyes National Seashore under agricultural lease/special use permits (lease/permits), with terms up to 20 years.

NEED

Ranching has a long and important history on the Point Reyes peninsula and adjacent National Park Service (NPS) lands. These working ranches are a vibrant part of Point Reyes National Seashore and represent an important contribution to the superlative natural and cultural resources of these NPS lands. Protection of these diverse and unique resources is an important responsibility shared by the NPS and park ranchers within the agricultural lease/permit areas. On November 29, 2012, the Secretary of the Interior issued a memorandum authorizing the NPS to pursue long-term lease/permits for dairy and beef ranching operations. The Secretary's memorandum demonstrates the support of the NPS and the Department of the Interior for the continued presence of dairy and beef ranching operations within these NPS lands.

A comprehensive management plan is needed:

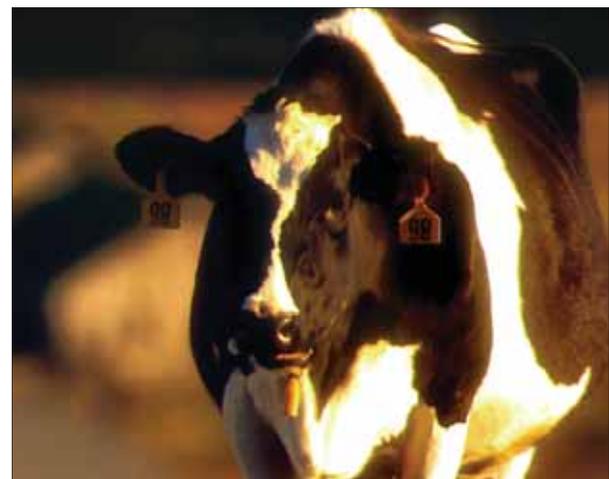
- To articulate a clear vision for ranching on existing ranch lands administered by Point Reyes National Seashore.
- To implement the Secretary of the Interior's direction to pursue issuance of lease/permits with terms up to 20-years.
- To address concerns related to elk impacts to existing ranch operations.
- To provide clear guidance and streamline processes for park and regulatory review of proposed ranching activities, including best management practices that promote protection of park resources.



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Ranching Practices Workshop

Pasture Management

Through the planning process, pasture management has been identified as important to beef and dairy ranch operations in the park. Pasture management includes a variety of activities that are intended to enhance the quality and quantity of forage on ranchlands.

Ranchers are currently conducting pasture management activities on approximately 15% of lands under lease/permit.

Pasture Management Activities

Pasture management activities vary from ranch to ranch, depending on the rancher's management approach and interests, and specific site conditions.

Soil Preparation

Pasture management activities may include differing levels of *soil preparation*, ranging from no-till to discing and plowing and include:

- Aeration
- No-Till
- Tilling
 - Ripping – breaks surface crust and opens a furrow
 - Discing – breaks up clods of soil and smooth's the field for planting
 - Plowing – turns the soil and incorporates residue into the soil

Seeding

The primary pasture management activity proposed by park ranchers for pasture enhancement is *seeding* with forage species for:

- Pasture Improvement
- Erosion Control
- Weed Management
- Silage/Haylage/Hay (See Harvest Mowing for more detail)

Nutrient Management

Other pasture management activities proposed by park ranchers for pasture enhancement include *nutrient management* with:

- Manure (all park dairies are now organic and have smaller herds than when they were conventional, so less manure is now being spread)
- Compost
- Commercial fertilizer (not on certified organic or natural pastures)

Harvest Mowing

Intensive pasture management activities include *harvest mowing* to maximize the use of the forage produced. Harvest mowing is used for the following purposes:

- Silage
 - Silage is cut earlier in the season than haylage and is wetter than haylage
 - Silage is often stored in covered piles or bunkers
- Haylage
 - Cut earlier in the season than hay
 - Baled within a couple days of being cut
 - Wrapped in plastic to allow for fermentation
- Hay
 - Cut later in the season than haylage
 - Dries on the ground and is baled
 - Drier than haylage and is preserved without fermentation
- Windrowing
 - Tall grass is mowed and left in windrows or bailed
 - Does not require seeding
 - Cutting vegetation that is naturally growing

Brush Control and Weed Control

The primary pasture management activities proposed by park ranchers for pasture maintenance are *brush control and weed control*. These activities are conducted to maintain or increase areas of grassland habitat available for grazing activities. In areas where brush control and weed control activities are implemented, regular maintenance would be required.

- Weed Mowing (early season prior to appearance of flowering seed heads)
- Brush Mowing – May be timed to avoid bird breeding season
- Plowing/discing/tilling/ripping
- Scraping
- Fire
- Seeding
- Chickens foraging on weeds
- Herbicide (not on certified organic or natural pastures)

Fencing

Fencing is an also important pasture management tool, allowing for better control over timing and duration of grazing at any one location. Timely removal of abandoned fences is important for park visitor and wildlife safety.

- Barbed wire livestock fencing
- Electric fencing
- Breaking pastures up into several smaller pastures for more rotation
- Wildlife friendly fencing
- Different type of fencing may be necessary to support other practices (e.g. row crops, sheep, etc.)

Diversification

Diversification was also identified as an important activity for some ranchers, but typically the first priority is to improve pasture management and then focus on potential diversification opportunities.

In order to react to poor forage production years, reductions in the price of their products, or increases in the price of inputs such as grain and hay, park ranch operators identified the need to remain flexible and have economic opportunities outside of solely beef or dairy production.

Diversification Activities

Diversification activities identified through the scoping process and ongoing discussions include the addition of new types of livestock, row crops, stabling horses, paid ranch tours and farm stays, small-scale processing of dairy products and sales of local agricultural products. Some of these diversification activities might be limited to core areas of the ranch where more intensive activities traditionally occur. It should be noted that while some of these activities have been permitted on individual ranches, the Ranch CMP will look at activities across multiple operations within the planning area.

Row Crops

- Non-silage crops
- Dryland farming

Other Types of Livestock

- Stockers (cattle) – This would typically include yearling steers and heifers rather than cow/calf operations
- Chickens, ducks, geese, and turkeys
- Pigs (both in ranch core and pastures)
- Sheep (may require woven wire fences and dogs for protection)
- Goats
 - To eat plants that cows won't eat (would require hot wire or electric fence)
 - Milking and meat goats (in ranch core)
- Rabbits for meat (in ranch core)
- Horses/horse breeding
- Beekeeping
- Worm castings in ranch core

Modifications to Ranch Infrastructure

- Maintain, modify or build structures to support diversification activities or ranch worker housing needs, including:
 - Small scale processing of dairy products
 - On-farm retail sales of products produced on the ranch and other local farm products
 - Additional worker housing

Other Diversification Activities

- Tours with visitors and weddings
- Farm Stay/Bed & Breakfast
- Collaboration with the park on education programs for public

Succession

Succession is the transfer of an NPS lease/permit for continued operation in agriculture. There is a range of options for how the park could evaluate the succession process in the event there is not an immediate family member to take on the lease. These are some of the most common options we've heard:

- Lease to a family member of most recent park rancher
- Lease to a neighboring rancher within the park
- Lease to a non-neighboring rancher within the park
- Put it out for bid for park ranchers only—based on conservation-focused grazing management, not price
- Consider allowing an employee of a park ranch to take over operation or to be eligible to bid for a lease
- Put it out to competitive open bid—based on conservation-focused grazing management, not price



Tule Elk Workshop

Current Elk Status in Pastoral Zone

- D Ranch Herd – 95 estimated total animals. The main herd is a generally cohesive group of approximately 60 elk consisting of females, juveniles, and a few males. The remaining males form one to two small bachelor groups that remain separate from the main herd except during the rut. The main herd and bachelor groups spend time on A Ranch, B Ranch, C Ranch, E Ranch, the former D Ranch, and in surrounding areas with no cattle grazing.
- Limantour Herd – 110 estimated total animals. These elk are spread over a wide area from Coast Camp to as far north as the H Ranch. The females, juveniles, and some males remain in the wilderness area. Approximately 25–30 males spend time on ranch lands along Estero Road through the Home Ranch area. Most activity is south of Sir Francis Drake Boulevard, with only 7–8 elk to the north at any one time. The males return to the wilderness area during the rut.
- Final 2014 census numbers will be complete this winter 2014/2015.

NPS Ungulate Management Plans

- The NPS has a history of developing ungulate management plans that require a long-term commitment to active management and monitoring.
- Currently there are approximately 10 ungulate management plans completed through the National Environmental Policy Act process in the NPS addressing various issues related to management of ungulates including white-tailed deer, bison, elk, and mountain goats.
- The NPS has several tools available for directly managing ungulate populations to meet resource management objectives including contraception, translocation, and fencing, as well as lethal removal by NPS employees, contractors, skilled volunteers, and/or a combination.
- Ungulate management tools are selected based on the type of park unit, location, resource issue, conditions at the park, funding, public input, logistics, and other concerns.

Point Reyes Elk Management Planning Efforts

NPS has been researching and discussing management alternatives for elk on park ranchlands as part of this process. The park has met multiple times with park ranchers and other stakeholders to solicit their feedback. In summer 2014, the park hosted a two-day workshop with the California Department of Fish and Wildlife (CDFW) and the NPS Biological Resources Management Division (NPS-BRMD) to discuss management alternatives and potential management techniques for Point Reyes.

Management Alternatives

The Ranch CMP will present a range of alternatives to address elk on ranch lands. The alternatives will range from “no action” on one end to “no elk in the pastoral zone” on the other end. Alternatives that consider managed elk within the pastoral zone (limited in population size, range, or both) will also be analyzed.

Within each alternative, a combination of management techniques, or tools, would be recommended to meet the management goals of the alternative. Management tools will be evaluated for impacts to Threatened and Endangered species, visitor experience, ranch operations, and other resources, as is typical for a NPS planning document. More importantly, however, in regards to elk management, the proposed tools will be evaluated in terms of:

- Safety (human and animal)
- Effectiveness
- Sustainability
- Law and Policy

Tule Elk Management Techniques

Direct Population Management

Direct population management techniques would cause a decrease in the number of elk within an area using one or a combination of the following techniques:

Contraception

Wildlife populations have evolved highly effective, adaptive and complex breeding ecologies that are key to species survival. The effects of fertility control techniques on breeding ecology and natural selection is not completely understood, and the impacts of wildlife behavior and ultimately species adaptation and survival are unclear. Specifically in elk, the role of these techniques might have impacts on their complex breeding biology.

Fertility control options are generally analyzed in NPS ungulate population planning efforts. However, no agencies within the United States are using only contraceptive techniques for long-term management of elk populations. Contraception trials at Tomales Point were included as a management action in the 1998 elk management plan for Point Reyes.

Fertility Control Treatments

- Potential behavioral changes associated with alteration of natural reproductive cycles through fertility control treatments have not been tested in large populations of free-ranging elk.
- Regardless of the technique, all fertility control methods would require capture, immobilization and marking of the target animals.
- In general, these techniques would require annual treatment by hand injection of between 60% and 90% of the cow elk in the populations to achieve the desired effect.
- Because elk are long-lived animals, the effects of a contraception program on overall population size would be minimal within the first 5–10 years following implementation.
- Past experience suggests that helicopter capture

would be required to treat a portion of the population. Initially some portion of cows could be captured from the ground (i.e., ground darting on foot, from a vehicle, or over bait) but most large scale operations require helicopter capture as animals become more difficult to capture after repeated operations.

Translocation

Translocation Outside of Park (to CDFW)

- Translocation of elk outside of the park requires CDFW consent, partnership and identification of a location with capacity for additional elk.
- Tule elk at Point Reyes are the only tule elk in California known to be carriers of Johne's disease.
- Current CDFW policy is to not accept any elk from Point Reyes due to concerns about Johne's disease.
- The disease is difficult to test for due to false negative results that may occur. Elk must be shedding the bacterium that causes the disease in their feces at the time of testing for a positive result. Elk can carry Johne's for years without demonstrating any outward, clinical signs of the disease.
- Point Reyes has initiated a Johne's disease testing program and will use the results to continue our dialogue with the CDFW and explore the option of moving elk out of the park.

Johne's Disease Testing

- The NPS implemented a Johne's disease testing program with University of Wisconsin – Johne's Testing Center in May 2014.
- Sampling occurs every month, alternating between the D Ranch elk herd and the Limantour elk herd.
- The goal is to sample 20–30 individual elk during each sampling round.
- All results to date from the testing program have been negative.

Translocation Within Park

- Translocation options within the park are limited.
- Elk moved to the Limantour wilderness will have a strong impulse to return to their original location. There is a high likelihood that even if a fence is built, elk will try to go around the fence.
- Experimental relocation of elk from D Ranch in early 2015, a cooperative effort planned with the CDFW, will help determine if younger animals stay at the relocation site, or try to return to D Ranch. Three to four elk will be targeted for relocation and then monitored.
- Translocation within the park has the potential to move Johne's disease from pastoral zone elk to wilderness elk. Current Johne's disease testing will help determine this risk.

Lethal Removal

- Several methods of lethal ungulate removal have been used in the NPS, including use of park staff, contractors, trained volunteers, and authorized hunts.
- Population structure goals (i.e., sex and age ratios) would dictate which animals are culled in a given year.
- Elk meat could be recovered to the greatest extent possible. Other programs have provided meat to homeless shelters and to the California Condor recovery program.
- Lethal removal can also serve as a hazing technique. Elk will avoid areas where there is significant hunting pressure. On the other hand, skilled sharpshooting techniques can prevent elk from dispersing.
- Initial removal numbers would be higher, but long-term management would result in limited annual removal requirements.



NPS

Indirect Population Management

Indirect population management techniques are used to augment direct population management and are used to manage an existing number of animals.

Fencing

Fencing Approaches

- The elk fence on Tomales Point fences the elk into a 2,600-acre preserve.
- Where possible, the CDFW has moved away from managing fenced-in elk herds.
- Rocky Mountain National Park recently fenced elk out of willow and aspen groves to protect these sensitive habitats from overgrazing by an expanding elk population.
- The CDFW's approach is to encourage landowners to fence elk out of private lands when other solutions are not viable.
- A fence-out technique at Point Reyes could include erecting fences around ranches or high value pastures.
- A proposal has been made to construct an elk fence along the wilderness/pastoral zone boundary, from the Estero de Limantour to the top of Mount Vision, in order to keep elk within the wilderness area.

Fencing Considerations

- Fencing proposed at the wilderness/pastoral zone edge would be located outside of wilderness.
- An access corridor would need to be constructed along parts of the proposed fence line in order to build and maintain fence.
- Extensive vegetation removal will be required if fence does not run through or at the edge of existing pastures.
- Any elk fence would include design consideration to allow movement of other wildlife through the fence.
- Elk will follow the fence looking for a way through or around, especially if elk are moved from D Ranch to the wilderness side of the fence.
- The planning process would have to include a response plan for when elk get around fence.

Hazing

- Hazing techniques are designed to deter wildlife away from resources in need of protection.
- At Point Reyes hazing has been used since 2012 to keep elk off of high value pastures. Elk are approached on foot and moved to adjacent areas not leased for cattle grazing.

Habitat Enhancements

- The goal of habitat enhancement projects would be to provide elk with high quality habitat in areas adjacent to ranchlands in order to shift elk use away from ranches. Habitat enhancements may include:
 - Water development
 - Weed control and brush control

Tule Elk Facts

Tule elk are the smallest elk subspecies, ranging in size from 400 to 600 pounds.

The annual reproductive cycle results in seasonal changes to elk herd size, composition, and spatial distribution.

Females typically come into estrus and become pregnant during the rut season (August–October in the northern hemisphere).

Only bull elk grow antlers. Each antler can weigh up to 10 pounds. Antlers are shed and regrown annually.

Many agencies accept a mature elk as equivalent to 0.6 Animal Units, or slightly more than half of a mature cow in terms of forage consumption.

How to comment

There are several ways to submit comments on the Ranch CMP Community Workshops.

1. Via the internet through the NPS Planning Environment and Public Comments site at: <http://parkplanning.nps.gov/ranchcmp>
2. In-person at the public workshops recorded during the discussion groups
3. Mail or hand-delivered to park headquarters:

Point Reyes Ranch CMP/EA
Superintendent
Point Reyes National Seashore
1 Bear Valley Road
Point Reyes Station, CA 94956

The public comment period will close on November 26, 2014

Comments will not be accepted by FAX, e-mail, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted.

You should be aware that your entire comment—including personal identifying information, such as your address, phone number, and e-mail address—may be made public at any time. While you can ask in your comment that your personal identifying information be withheld from public review, the National Park Service cannot guarantee that it will be able to do so.