

MARINE MAMMAL SUPPLEMENT TO THE
NATURAL RESOURCES MANAGEMENT PLAN
POINT REYES NATIONAL SEASHORE

Recommended: John L. Sanning 11/17/80
Superintendent Date

Approved: Loren A. Chapman 1-21-81
Regional Director, Western Region Date



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Department of the Interior

National Park Service

FINDING OF NO SIGNIFICANT IMPACT

POINT REYES NATIONAL SEASHORE, CALIFORNIA

Western Region

In compliance with the National Environmental Policy Act of 1969, the National Park Service has prepared an environmental assessment on the following proposed project:

MARINE MAMMAL SUPPLEMENT TO THE
NATURAL RESOURCES MANAGEMENT PLAN
POINT REYES NATIONAL SEASHORE

The assessment process did not indicate a significant environmental impact from the proposed action. Consequently, an environmental statement will not be prepared.

The environmental assessment is on file at the above park and will be available for public review upon request.

11/14/80
Date

John H. Darling
Superintendent

1/21/81
Date

Howard H. Chapman
Regional Director, Western Region

FINDING OF NO SIGNIFICANT IMPACT FOR
MARINE MAMMAL SUPPLEMENT TO THE
NATURAL RESOURCES MANAGEMENT PLAN

POINT REYES NATIONAL SEASHORE

The National Park Service (NPS) proposes to adopt a plan which provides for the protection and public interpretation of the marine mammals in Point Reyes National Seashore. The six species of marine mammals associated with the seashore are: California and northern sea lions, harbor seal, northern elephant seal, southern sea otter, and the California gray whale. An environmental assessment was prepared in June 1980. Alternatives analyzed included no action, immediate removal of all beached animals, year-round closure of haul-out sites, artificial reintroduction of the sea otter and control of the sea otter population.

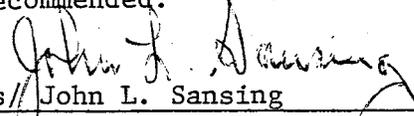
The public comment period lasted 75 days, however only four letters were received: three from private organizations, and one from a private citizen. There was general agreement on the content of the plan with most comments reflecting minor technical changes. These have been incorporated.

The NPS proposes to prevent beaching of marine mammals wherever possible, appropriate disposal of marine mammal carcasses, conduct research on animal populations and hauling-out patterns, seasonally control visitor use at haul-out sites and provide visitor interpretive programs.

No additional compliance steps are necessary prior to plan implementation.

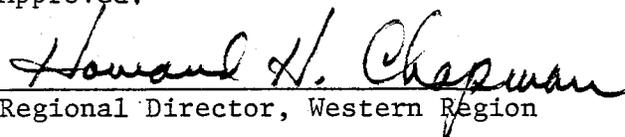
The impacts of this proposal will be limited to improvement in the protection of marine mammals in the seashore and increased understanding of marine mammal behavior through research. Based on these limited impacts and public and agency review of the environmental assessment, the NPS records a "finding of no significant impact." Since this proposal does not constitute a major federal action significantly affecting the human environment, an environmental impact statement will not be prepared.

Recommended:


s// John L. Sansing
Superintendent, Point Reyes National Seashore

November 17, 1980
Date

Approved:


Howard H. Chapman
Regional Director, Western Region

1/21/81
Date



MARINE MAMMAL SUPPLEMENT
TO THE NATURAL RESOURCES MANAGEMENT PLAN
POINT REYES NATIONAL SEASHORE

OBJECTIVES OF THE SUPPLEMENT

To protect, preserve and interpret the marine mammals in the park and provide for the enjoyment of these species by the public.

REVIEW OF STATUS OF MARINE MAMMALS IN THE SEASHORE

The four species of pinnipeds (the California, and northern sea lions, harbor seal and northern elephant seal), the southern sea otter and the California gray whale have been associated with what is now Point Reyes National Seashore since California's earliest chronicled times. The gray whale has been largely a transient in near-shore waters but the remainder of these marine mammals were or now are resident at traditional sites (Marine Mammals of the Northwestern Coast of North America; 1874, Charles M. Scammon).

California Gray Whale

Virtually the entire world population of this species migrates along the Point Reyes coastline. Its southbound migration to Mexican breeding and calving sites occurs during a short period from late November to mid-February; its northward migration is spread from late January well into April and May. The whales pass very close to shore at Point Reyes; many occur just beyond the surf. Protected by international law, the gray whale population has recovered from near-extinction in earlier times. Recent evidence from the Farallon Islands/Point Reyes area indicates that as the population increases further some of the animals tend to remain for extended periods (into July and sometimes longer) in these waters, rather than moving all the way to the Arctic for the non-breeding period. Their large numbers and behavior, unique among large baleen whales, affords an opportunity for the public to observe these animals. Whale watching from the Point Reyes Headlands is a popular winter activity.

Southern Sea Otter

Historically this sub-species resided year-round in the near-shore waters of Point Reyes National Seashore, most likely in association with kelp beds (University of California, Museum of Vertebrate Zoology, Berkeley). The species is still widespread along the Alaska coast but was nearly exterminated from the California coast by fur hunters by the end of the 19th century.

A residual population of fewer than 1500 animals has since been expanding from an isolated area of the Big Sur coast at a rate of about 2.5 miles per year at both its northern and southern fronts (California Department of Fish and Game). The northern front has reached Monterey Bay. If left alone, the population would likely reoccupy its former range, including Point Reyes National Seashore. Probable areas of concentration would be in areas where kelp occur: Abalone Point to the Coast Camp area south of Limantour Beach; the Headlands and especially Bird Rock and Tomales Point. In recent times individual or paired sea otters have visited Point Reyes waters (Point Reyes Bird Observatory and University of California, Museum of Vertebrate Zoology, Berkeley).

Northern Stellar Sea Lion

A small population resides year-round on the rocks offshore from the Point Reyes Headlands. The size of the local population, however, is not known. The species has been declining in number at the southern end of its range during the past 40 years; as Point Reyes is in this latter region it is highly likely that this has been the case in the Headlands. Related to the decline have been low pregnancy rates, high pup mortality and a high incidence of premature births. Factors possibly contributing to this decline are disease (including leptospirosis), pollution, heavy metals, pesticides and a contracting range due to increased competition by the California sea lion. The population seems to be remaining healthy in the northern part of its range. Isolated by high cliffs, rough water and existence of an ecological preserve insure that human activities rarely affect the northern sea lion population directly.

California Sea Lion

This migratory species is present at Point Reyes from August to May. Virtually all observed individuals are males, although a few females may be present. It is unknown whether the species breeds at Point Reyes; the northern-most known breeding ground is the Farallon Islands. The world population of this species has increased dramatically during the past 40 years, but population growth has leveled off in recent decades. The number of animals that frequent Point Reyes National Seashore is not known. They do haul out at the Point Reyes Headlands and at Tomales Point. During winter months they are attracted in unknown numbers by the herring spawn in Tomales Bay, primarily in January, February and March.

Northern Elephant Seal

This species once bred at Point Reyes, although the exact locality or the size of the population is not known (Marine Mammals of the Northwestern Coast of North America, 1874, Charles M. Scammon). Based on site characteristics elsewhere, the most probable rookery site was Drakes Beach. The world population is re-colonizing its former range very rapidly.

The history of recolonization at the nearby Farallon Islands indicates that immature animals initially haul out at a prospective locality, usually to molt their fur in the spring. Some would eventually return to breed, especially if left undisturbed. If a breeding population became established, animals would frequent the area virtually year-round. In the past five years several young elephant seals have hauled out on park beaches in the fall. Unexpectedly, three pups, too young to be independent, have also been observed on park beaches in the winter during the past three years; the locations of the mothers was not determined.

Harbor Seal

Harbor seals haul out year-round on rocks, mud-flats and sandy beaches along the Point Reyes coastline. The known traditional hauling out sites are Hog Island, Bird Rock, the Point Reyes Headlands, Drakes and Limantour Esteros, the tip of Limantour Spit and Double Point. Others probably exist. The total Point Reyes population is estimated to be 1,200, making it the largest in California (Point Reyes Bird Observatory). However, this figure is subject to seasonal variation. Use of traditional hauling out sites also seems to be subject to seasonal variation.

The existing and potential conflict between seal habitat requirements and human recreational and commercial interests are important points when assessing the present status of this pinniped species. Depending on the location of the hauling out ground and the method of approach, harbor seals are exceedingly sensitive to human activities in the vicinity of their hauling out grounds and will stampede into the water if such activities are closer than 300 meters (Point Reyes Bird Observatory). The impact of disturbance is two-fold. During the pupping season, pup survival is impaired by the added stress of fleeing a disturbance source. Secondly, if disturbances are frequent and of long duration the seals' hauling out patterns are eventually disrupted so that they may temporarily or permanently abandon the site.

MANAGEMENT AND RESEARCH ACTIONS

Cooperative Agreements

Point Reyes National Seashore maintains a cooperative agreement with the National Marine Fisheries Service to protect and manage the marine mammals in the Seashore.

The California Department of Fish and Game and Point Reyes National Seashore maintain a Memorandum of Understanding for the enforcement of State Fish and Game regulations along the shoreline of the Seashore. This agreement is particularly important with regard to the Point Reyes Headlands and Limantour Estero Reserves because these areas are designated "Natural Research Areas". In these two areas, the Department of Fish and Game and Seashore regulations concerning the taking of marine organisms and entry into the areas are identical.

Live Beached Marine Mammal Action

Every attempt will be made to prevent marine mammals from becoming beached. Whenever possible, a beached animal will be observed by the park staff or their designate for at least 48 hours prior to taking any action. At the end of the observation period, a decision will be made by the Chief Ranger's Office as to whether the animal will be allowed to remain in place, be relocated, turned over to marine mammal rehabilitation facilities or destroyed. Rehabilitated animals will be released back in the Seashore as directed by the Chief Ranger's Office.

Marine Mammal Carcass Action

The carcass will be disposed of in the following manner of priority, as established by the Chief Ranger:

1. In low visitor use areas the carcass will be allowed to naturally decompose. An exception would be the sea otter which would be turned over to the U.S. Fish and Wildlife Service.
2. When the first action is not possible, the carcass will be made available to the California Academy of Science, San Francisco, or the Museum of Vertebrate Zoology, University of California, Berkeley, for research under approved permits.
3. The carcass will be released to other public and private educational facilities.
4. The carcass will be incinerated and/or buried.

Research Project Statements in Priority Order (to be included in the 1981 Revised Natural Resources Management Plan)

Conduct a one to two year harbor seal census study to assess seasonality in hauling out patterns for each of the known hauling grounds, determine the significance of each site to the seals, and identify present and potential conflicts between seal requirements and human recreational uses.

Conduct a study to determine the management implications on the Seashore by a repopulation of the northern elephant seal.

Conduct a one to two year census study to assess seasonality in hauling out patterns and locations of the two species of sea lions in the park.

Conduct a program to accurately catalogue all sightings and inventories of marine mammals and determine the cause of death or diagnosis of illness of any marine mammal, including tests for leptospirosis, San Miguel sea lion virus, heavy metals and pesticide poisoning.

Conduct a study to determine the management implications on the Seashore by a repopulation of the southern sea otter, and to determine if translocation to this area would be in the best interests of this threatened species.

Visitor Use Management of Haul Out Sites

All significant haul out sites will be posted prohibiting visitors or pets within 300 meters of the site during the months the site is used by marine mammals. This regulation will be enforced by National Park Service Rangers.

In cooperation with the National Marine Fisheries Service and the California Department of Fish and Game, flights of aircraft under 1000 feet in elevation will be prohibited within one-quarter mile of any haul out site.

Interpretive Programs

Interpretive and informational programs will be continued and further enhanced to provide visitors with the awareness, appreciation and understanding of the marine mammals of the Seashore.

Specific Management of Individual Species

California gray whale - No specific management action is proposed at this time beyond those already stated in this plan and the General Management Plan for the park.

Southern sea otter - No attempt will be made to reintroduce this species in the park until potential impact is studied, but natural repopulation will be allowed in all areas. Where competition with abalone divers occurs the otter will be protected and be allowed to feed naturally.

Northern (Stellar) sea lion - Currently found only in the Natural Research Areas and, therefore, is protected by the regulations and management of these areas.

California sea lion - Boat patrols will be conducted in Tomales Bay during the herring spawn season to protect the sea lion from poaching and harassment.

Northern elephant seal - Pending the results of the research projects included in this plan, portions of park beaches will be closed when a seal hauls out on the beach. This closure will be limited to the immediate area (100 meters) around the seal and will be closed until the seal leaves or is moved.

Harbor seal - The Double Point haul out site has already been posted as closed to all visitors during the pupping season. Other haul out sites in the park will be observed to determine if the site is being used as a pupping ground and, if so, will be posted as a closed area during the season of May and June.

ENVIRONMENTAL IMPACT OF THE PROPOSED ACTION

The agreements the Seashore maintains with the National Marine Fisheries Service and the California Department of Fish and Game will increase the protection of the marine mammals and their habitat.

The live beached marine mammal action will impact the environment by increasing the chances of survival of these marine mammals.

The marine mammal carcass action will allow carcasses to decompose and return nutrients to the system in a natural process. This decomposition may have an adverse aesthetic effect on visitors who may come into contact with the carcass, and could possibly aid in the spread of disease as other animals feed upon it. The carcasses turned over to research institutions will increase our knowledge of the species and cause of death.

The research projects proposed will have no environmental impacts of their own, but will result in a better assessment of the status of the marine mammals. The studies will also result in a better understanding of the conflicts between marine mammals and the park visitor.

Restricting visitors and pets from approaching haul out sites during the pupping season will have a beneficial effect on the environment. However, the restriction will limit the visitor in the ability to get a close look at the mammals in their natural setting during this time period. The same effect applies to the 1000 foot restriction placed on aircraft over these areas.

Allowing natural repopulation of the sea otter in the park will have a number of effects on the environment. The abalone population will be greatly reduced in the area, which will reduce the success of those people harvesting abalone, and the oyster farm industry in the area could also be adversely affected. The sea otter is a colorful and active animal and would provide an unforgettable visual experience to the visitor. The kelp beds would be enhanced and would support a greater diversity of biota. The ecology of the area would gradually change to resemble more closely the situation of pre-fur trade times when otters were present as an important ecosystem component.

Boat patrols in Tomales Bay during the herring spawn season would lower the poaching and harassment of all marine life in the area and, thus, have a beneficial effect on the environment.

Closing the immediate area around a hauled out or beached northern elephant seal will protect the animal and allow it to be observed by park personnel to determine the cause of the animal's behavior and decide what action, if any, needs to be taken. This closure will restrict the visitors' use of portions of park beaches although the closures would be minimal as only a few elephant seals have hauled out on park beaches within the past 5 years.

Closing Double Point haul out site during the harbor seal pupping season has been very beneficial to the environment. It has eliminated a great deal of intentional and unintentional harassment by visitors and their dogs. This, in turn, has had a calming effect on the seals and allowed a more natural stay at this site. The closure does adversely affect the visitors' ability to walk the beach in that area during that time.

MITIGATING MEASURES INCLUDED IN THE PROPOSED ACTION

Mitigating measures for beached, live or dead, marine mammals will include closing the immediate area around the animal to prevent conflict with the visitor. Whenever this is not possible due to high visitor use, carcasses may be transported to more isolated areas or turned over to scientific institutions previously listed in this plan. This will reduce the impact on the visitor and lower the chance of spreading disease to other animals. The cause of death of all marine mammals will be determined whenever possible and any carcass known to have a communicable disease will be removed to one of the scientific institutions.

A research study will be conducted to determine the management implications of the sea otter repopulating the area and to determine if translocation to this area would be in the best interest of this threatened species.

Restricting visitors from portions of beaches will be mitigated by interpreting the beached animals to the public to increase visitors' awareness and enjoyment of marine mammals.

ADVERSE EFFECTS WHICH CANNOT BE AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

The proposed management of marine mammals is designed to enhance rather than adversely affect the resources. Nevertheless, in any chosen action there are "trade-offs" which must be made and occasionally the "trade-offs" involve unavoidable adverse effects in the chosen proposal.

The marine mammal carcass action will allow carcasses to decompose on the beach which could possibly detract from visitors' experiences.

The closure of some beach areas during pupping seasons will restrict visitors' use of these areas, if only for a short period of time.

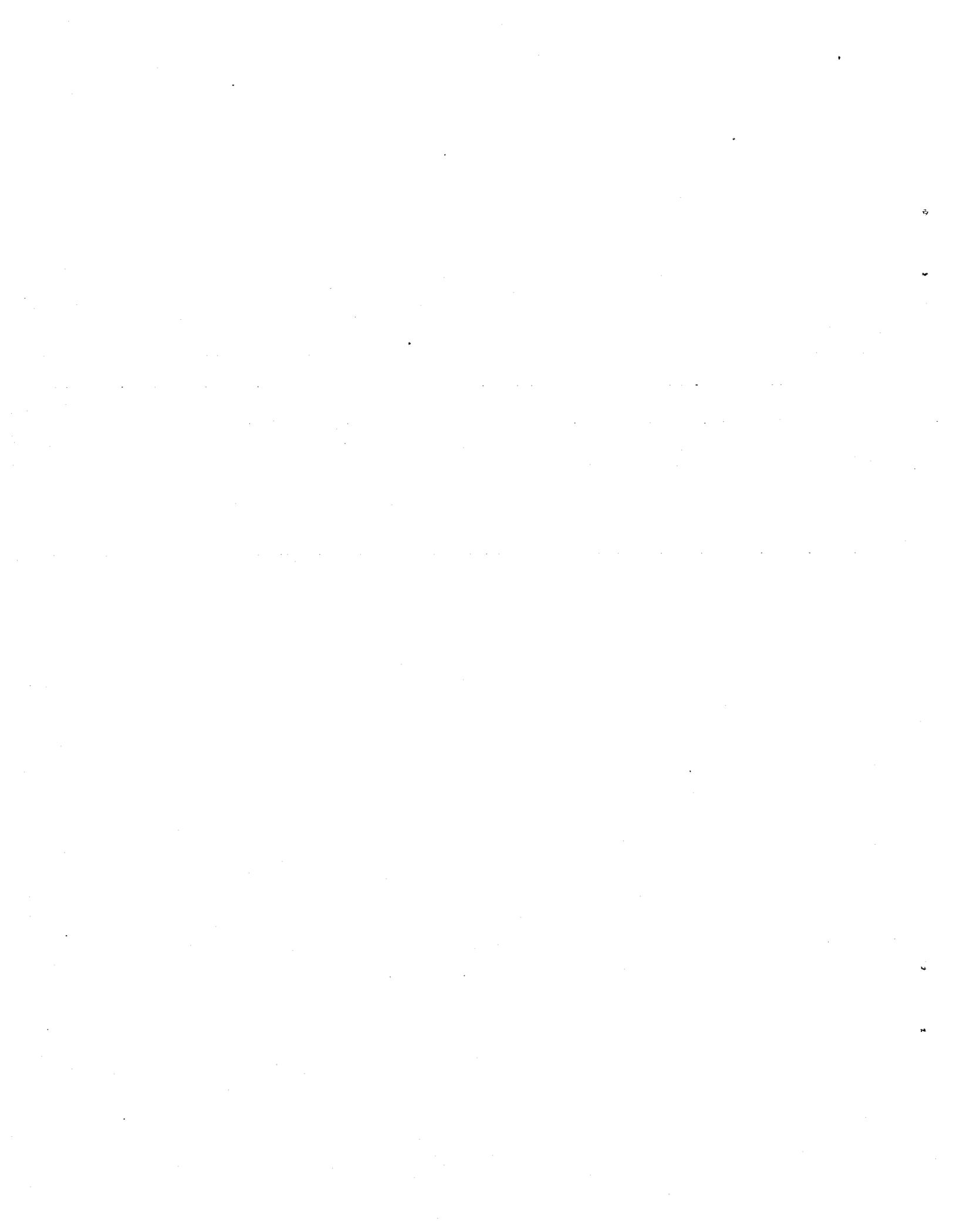
The natural repopulation of the sea otter while enhancing some marine populations will reduce the abalone and other marine animal populations, thus reducing the potential for harvesting or observance of these animals by the visitor.

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S
ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF
LONG-TERM PRODUCTIVITY

Certain actions included in this supplement would limit local short-term uses of the environment by the visitor but will enhance the long-term natural processes of the environment.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES
WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION

There would be no non-renewable resources committed by the plan. The only renewable resource that would be affected would be the nearshore ecosystem which would come to more closely resemble the natural equilibrium which formerly existed when the sea otter was the keystone species in the kelp beds.



ALTERNATIVES TO THE PROPOSED ACTION

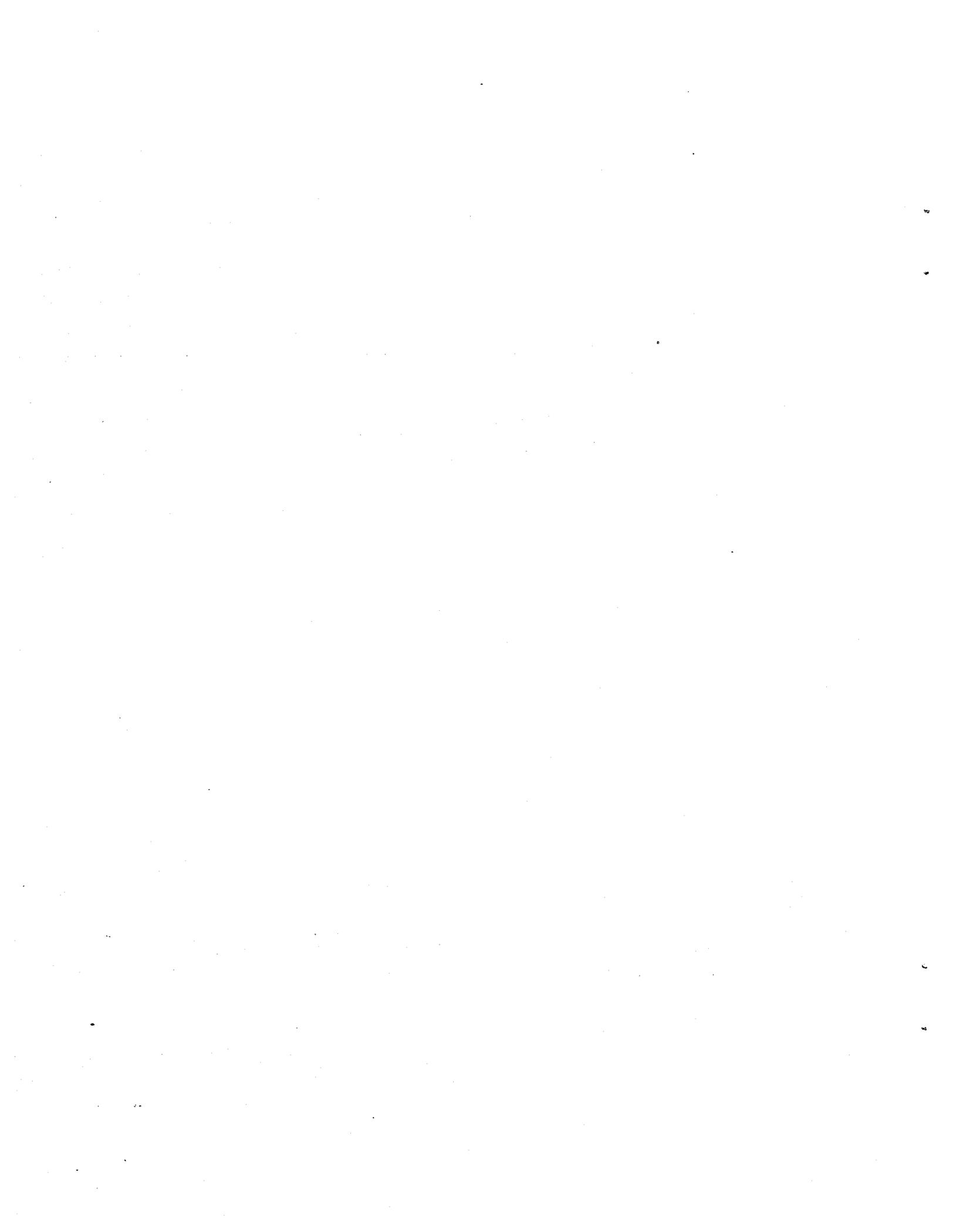
Alternatives to the proposed beached marine mammal action include removing all animals beached as soon as observed or to take no action at all. Removing all beached mammals would reduce the potential for adverse visitor contact and reduce the potential for the spread of disease to other animals. However, this action would increase the mortality of live beached animals and disrupt the natural cycle of decomposition of dead animals. Furthermore, there is no proper way to dispose of animals in accordance with the Marine Mammal Act. Taking no action at all would allow the beached animals to be harassed and moved by visitors, decreasing its chance for survival and thereby increasing the chance of spreading disease among animals and possibly to the visitor.

The alternative to research would be not conducting any studies at all. This would prevent all factions from gaining a better assessment of the status and habitat of marine mammals, their potential conflict with the public and interaction with other animals.

The alternatives to restricting visitors from haul out sites during pupping seasons would be to either impose a year-round closure or no restrictions whatsoever. No restrictions would allow continued disturbance to the animals which adversely affects their condition and pupping success. Ultimately, continuous disturbance would cause the animals to abandon the site. A year-round restriction would protect the animals but restrict the visitor's use of beaches during periods when no animals are present due to their migratory patterns.

The alternatives to the natural repopulation of the sea otter would be to artificially reintroduce this animal or prevent their repopulation of the area. The sea otter is protected as a "threatened species" under the Endangered Species Act and, therefore, preventing its reintroduction into any area would be a violation of this Act. The artificial reintroduction of the sea otter would hasten the return of the near-shore environment to a condition more closely resembling natural equilibrium but would first require studies to determine whether such an artificial reintroduction would be in the best interest of the threatened species and what effect it would have on the Seashore's ecosystem.

The alternative to boat patrols on Tomales Bay is to conduct no patrols which would reduce gasoline consumption but also allow continued poaching and harassment of all marine life in that area creating a detriment to research and monitoring.



CONSULTATION AND COORDINATION
IN THE DEVELOPMENT OF THE SUPPLEMENT AND IN THE
PREPARATION OF THE ENVIRONMENTAL ASSESSMENT

During the preparation of the Supplement and Environmental Assessment the following individuals and agencies were consulted for their input of knowledge, suggestions and recommendations.

1. Jim Lecky, Wildlife Biologist, National Marine Fisheries Service, Terminal Island, CA.
2. Sarah Allen, Researcher, Point Reyes Bird Observatory, 4990 State Route #1, Stinson Beach, CA.
3. Robert Jones, Museum of Vertebrate Zoology, University of California, Berkeley, CA.
4. Dr. Leslie Dierhauf, Veterinarian, California Marine Mammal Center, Marin Headlands, Sausalito, CA.
5. Pete Chorney, Law Enforcement Division, National Marine Fisheries San Francisco, CA.
6. Harriett Huber, Biologist, Point Reyes Bird Observatory, 4990 State Route #1, Stinson Beach, CA.
7. David Ainley, Director of Research, Point Reyes Bird Observatory, 4990 State Route #1, Stinson Beach, CA.

COORDINATION
IN THE REVIEW OF THE DRAFT SUPPLEMENT
AND ENVIRONMENTAL ASSESSMENT

Copies of the Supplement and Assessment were available to the public for review and comment in July and August, 1980. The public review period was originally open for 30 days and then extended 45 days until October. All letters of comment received through September are included in the appendix.

Comments on the preliminary Draft and Assessment were requested from the following agencies, organizations and individuals.

Department of the Army
 Corps of Engineers
 Department of Commerce
 California Department of Fish and Game
 Marine Resources Division
 Sacramento Headquarters
 California Department of Parks and Recreation
 Sacramento Headquarters
 Marin County Headquarters
 California Marine Mammal Center
 California Native Plant Society
 California State Horseman's Association
 College of Marin, Biology Department
 Environmental Action Committee of West Marin
 Fish and Wildlife Service
 Inverness Improvement Association
 League of Women Voters of the Bay Area
 Marin Audubon Society
 Marin County Resource Conservation District
 National Audubon Society
 National Marine Fisheries
 Wildlife Biology Headquarters
 Law Enforcement Division
 National Parks and Conservation Association
 Point Reyes Bird Observatory
 Resources Agency of California
 Sierra Club
 Forest Service
 University of California, Berkeley
 Museum of Vertebrate Zoology
 Vedanta Society of Northern California
 West Marin Units, Marin Conservation League
 Wilderness Society

Advisory Commission for Golden Gate National Recreation Area
 Audubon Canyon Ranch
 Conservation Associates
 Environmental Forum
Independent Journal
 KTOB Radio
 Marin County Farm Bureau
 Marin Municipal Water District
 Division of Land Management
 Marin Rod and Gun Club, Inc.
 North Central Coast Commission, California Coastal Zone
 Conservation Commission
 People for a Golden Gate-National Recreation Area
Point Reyes Light
 Salisbury State College, Maryland
 Department of Geography
 San Francisco State University
 Department of Ecology and Systematic Biology

Tomales Bay Association
Tomales Bay Sportsmen's Association
Jerry Friedman
Kay Holbrook
Elizabeth Terwilliger

The following is a list of agencies, organizations, and individuals who submitted comments on the preliminary Draft Supplement and Assessment.

People for a Golden Gate National Recreation Area
Point Reyes Bird Observatory
Friends of the Sea Otter
Ms. Pamela Ferris-Olsen

SUMMARY OF COMMENTS AND RESPONSES

Comments and Responses are summarized as follow:

People for a Golden Gate National Recreation Area

Comment: The Plan appears to be carefully prepared; there has been consultation and coordination with good people in this field. The only addition would be a statement to allow marine mammals to remain in place after 48 hours as an option under the "Live Beached Marine Mammal Action" section.

Response: An option has been added to the "Live Beached Marine Mammal Action" section to allow animals to remain in place after the 48 hour observation period (pg. 4)

Point Reyes Bird Observatory

Comment: A number of minor technical points on specific words and phrases were listed with the general comment that the plan was good, with some specificity yet enough flexibility to meet most circumstances that could arise.

Response: Each individual point was addressed in the final plan (see pg. 2, line 7, pg. 3, line 3, pg. 3, line 7, pg. 4, line 6). The additional research project statement on the sea lions was added as the third priority (pg. 4).

Friends of the Sea Otter

Comment: Rewrite page 1, par. 4, to better state historical data on sea otter.

Response: Paragraph reworded but not all of comment included.

Comment: If a sick or dead sea otter should be found at Point Reyes National Seashore, the California Department of Fish and Game or the U.S. Fish and Wildlife Service should be notified.

Response: The telephone numbers and individuals to contact at the Department of Fish and Game and the Fish and Wildlife Service have been included in our marine mammal procedures for the park and those agencies will be notified should such an incident occur.

Comment: Revise proposed study of sea otter to include evaluation of the affects of transplanting the sea otter to Point Reyes National Seashore on the threatened otter population.

Response: Proposed study has been revised to reflect this addition.

Comment: Friends of the Sea Otter wish to help develop programs and literature for the park visitor on the plight of the sea otter and its former role in the Seashore.

Response: The park's Interpretive Division will include this in their interpretive planning on marine mammals and we appreciate the offer of assistance.

Comment: The statement "No attempt will be made to reintroduce this species in the park..." should be omitted.

Response: This statement has been changed to state that no attempt will be made until the impact of reintroduction is studied. This leaves the option of reintroduction available but pending the outcome of thorough study of the impact of reintroduction on the sea otter and the park's ecosystems.

Comment: Rewrite statement on effect of sea otter repopulating Seashore to reflect the fact that the impact would be primarily a change of near-shore systems to more closely resemble the natural conditions of pre-fur trade time.

Response: Statement rewritten (Pg. 6, par. 5).

Comment: Specific, technical comments on words and phrases were addressed.

Response: All comments were considered and adjustments made (pg. 9, par 4, pg. 7, par. 3, pg. 6, par. 5, pg, 8, par, 6).

Comment: First priority for carcasses should be for their use by scientific and educational institutions with second choice being the natural decomposition.

Response: Our primary resource management objective is to perpetuate natural system processes as closely as possible. The natural decomposition of marine mammal carcasses is part of the process and, therefore, is our first priority in options. We do, however, recognize the need for research on these mammals and will consider the removal of carcasses on a case by case basis.

Ms. Pamela Ferris-Olsen

Comment: More research and information is needed on marine mammals in the Seashore before development of a management plan.

Response: We agree that more research and information is needed (pg. 4, listing research projects), but we cannot wait for all research results before implementing a preservation plan for marine mammals in the Seashore.

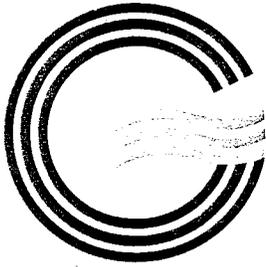
Comment: The draft continually refers to the negative impact of the sea otter with no mention of the positive impact.

Response: The plan has been reworded to reflect a more even-handed evaluation of the impacts of the sea otter on the ecosystem.

Comment: Specific comments on words and phrases in plan were addressed.

Response: All comments were considered and adjustments made (pg. 9, par. 5, pg. 7, par. 3, pg. 6, par. 5, pg. 6, par. 2, pg. 5, par. 5, pg. 4, par. 5 and 7).





PEOPLE FOR A

OLDEN GATE NATIONAL RECREATION AREA

3827 Clement Street • San Francisco, Calif. 94121 • (415) 752-2777

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W. Dana Jordan
L. J. Kline
Linda Korman
Lester L. Lieb
D. Todd Rubenstein
Judene Sunde
Robert L. Weinberger
Robert C. Young

August 14, 1980

John Sansing, Superintendent
Point Reyes National Seashore
Point Reyes, CA 94956

Dear John,

People For a Golden Gate National Recreation Area appreciates the opportunity to comment upon the Draft Marine Mammal Supplement to the Natural Resources Management Plan.

The only specific comment we have is that on page 4, under "Live Beached Marine Mammal Action," we would suggest the addition of the following underlined phrase: "as to whether the animal will be allowed to remain in place, be relocated..."

The plan appears to be carefully prepared; there has been consultation and coordination with good people in this field.

Sincerely,


Amy Meyer, Co-Chairman

POINT REYES BIRD OBSERVATORY

4990 Shoreline Highway, Stinson Beach, California 94970
Telephone (415) 868-1221

13 August 80

Superintendent John Sansing
Point Reyes National Seashore
Point Reyes Station,
California 94956

Dear John,

Thank you for the opportunity to comment on the draft Marine Mammal Supplement to the Natural Resources Management Plan. David Ainley, Harriet Huber, Sarah Allen, and I have reviewed the draft and would like to make the following suggestions:

Pg. 2, line 7 under "Northern Sea Lion"...Sentence should begin, "Factors possibly contributing..."

Pg. 3, line 3...should read, "...to molt their fur in the spring."

Pg. 3, line 7...should read, "...hailed out at Drakes Beach in the fall..." (they are not molting then)

Pg. 4, line 6 under "Live Beached Marine Mammal Action"... The list of possible actions should include, probably as the first choice, leaving the animal alone (and possibly protecting it from visitors) for longer than 48 hours. Adding this option would be consistent with pg. 6, paragraph 7.

Pg. 4, under "Research Project Statements"...We think that the seasonal status of the two sea lions should be assessed, perhaps as a third priority. Both species are in a process of transition in this region, and some background (baseline) information should be gathered for comparison in the future.

Pg. 5, under "Specific Management of Individual Species"... Northern elephant seal...This paragraph should not limit the proposed action to Drakes Beach. As it is written, it assumes that Drakes is the only beach where they will haul out, or that they won't get this level of protection if they haul out elsewhere.

Pg. 7, second paragraph...The first sentence presumably refers only to harbor seals and not to northern elephant seals whose appearance could affect visitor use outside the pupping season (pg. 5).

13 August 80

Finally, in reference to pg. 3, line 10, I thought the two northern elephant seal pups last winter were at Point Reyes Beach between South Beach and the Point. Did I hear that wrong?

Aside from the above points, which are mostly minor and technical, it looks like a good plan to us, one with some specificity, yet enough flexibility to meet most of the circumstances that should come up.

Sincerely,



Burr Heneman
Executive Director

FRIENDS OF THE SEA OTTER

P.O. BOX FF, CARMEL, CALIFORNIA 93921

August 30, 1980

Mr. John L. Sansing
Superintendent
Point Reyes National Seashore
Point Reyes, California 94956

Dear Superintendent Sansing:

On behalf of 4000 members nation-wide, FRIENDS OF THE SEA OTTER welcomes the opportunity to submit the following comments on the Draft Marine Mammal Supplement to the Natural Resources Management Plan, Point Reyes National Seashore. FRIENDS OF THE SEA OTTER is a conservation organization established in 1968 to help protect a healthy population of Southern Sea Otters and their marine environment. As the waters off Point Reyes once harbored large numbers of sea otters, and as otters may eventually come to reoccupy this area (occasional sightings have occurred in recent times), we are keenly interested in the Park Service's efforts to protect, preserve and interpret the Seashore's present and former marine mammal populations and their marine habitat.

We are very pleased with the spirit of stewardship which the Park Service has demonstrated at Point Reyes, and we welcome the development of a Marine Mammal Supplement which is consistent with the philosophy and objectives of the Natural Resources Plan for Point Reyes National Seashore (June 1976), which states:

"Point Reyes is superlative for its scenery and for the refuge it provides for man and for the elements of its natural ecosystems. It is large and varied enough to generate in people a vital feeling of being close to nature and can best serve man by providing a rich combination of scenic, biologic, historic, and recreational resources close to a major, rapidly expanding population core." (emphasis mine)

It is too early to know if the otters themselves, or if those government agencies now bearing the responsibility for the Southern Sea Otter's recovery, will determine that Point Reyes will again be a refuge for a significant number of otters. However, should they return, the Seashore will be enriched by the presence of this animal which epitomizes a "rich combination of scenic, biologic, historic and recreational" attributes.

If the beleaguered sea otter, now threatened by oil spills and sport and commercial shellfish interests, seeks a safe haven at Point Reyes National Seashore, we trust the Park Service will welcome it home.

Sincerely,



Carol Fulton

Enclosures

cc: Mr. Howard Chapman, NPS
Dr. Milton Kolipinski, NPS
Mr. Bill Pierce, NPS

Mr. Carl Benz, USFWS
Mr. John Twiss, MMC
Margaret Owings, FSO

Specific Comments

Page 1, para 4, Change to read, "Historically, the Southern Sea Otter resided year-round ... The species, which once ranged along the shores of the Eastern Pacific from Alaska south to Baja California, was nearly exterminated by fur hunters by the end of the 19th century. Although the Alaskan populations have recovered to an estimated 100,000 - 140,000 animals, the most recent census in California estimated fewer than 1,500 animals (California Department of Fish & Game census of June, 1979). Since its "rediscovery" off the Big Sur coast in 1938, the Southern Sea Otter has re-established its range north to Santa Cruz and south to Pismo Beach -- a total distance of about 200 miles, or approximately 10% of its former range. In 1977, the Southern Sea Otter was designated a "Threatened Species" under the Endangered Species Act, primarily due to its extreme vulnerability to oil spills, its reduced population and restricted distribution. Supposedly, if left alone and barring unforeseen circumstances, the population could eventually reoccupy its former range, including ..."

(Note: the Southern Sea Otter is not a species, but a subspecies (Enhydra lutris nereis) of the species Enhydra lutris, and so designated in its listing as a Threatened Species.)

Page 4, para 2, Live Beached Marine Mammals. In the unlikely event that a sick or injured sea otter should haul out at Pt. Reyes National Seashore, the California Department of Fish & Game or the U.S. Fish & Wildlife Service should be notified. As the Marine Mammal Center in Fort Cronkhite has neither the facilities nor experience to care for sea otters, we suggest you contact veterinarian Tom Williams in Pacific Grove (24-hour number 408-649-4111) or Jack Ames in the Monterey office of CDFG (408-649-2870, home 633-4181). Both men have extensive experience in handling and caring for sea otters, and could recommend procedures for local personnel to follow.

Page 4, para 3, Marine Mammal Carcass Action. As the Southern Sea Otter is a "Threatened Species," California Department of Fish & Game or the U.S. Fish & Wildlife Service must be notified to take possession of the carcass. All available information should be obtained from the carcass when discovered, and then it should be placed in a freezer to prevent further decomposition if necropsy cannot be performed right away.

Page 4, para 7, Change to read: "Conduct a study to determine the potential effects on the Seashore by a repopulation of the Southern Sea Otter, and to determine if translocation to this area would be in the best interest of the threatened otter population." (To avoid duplication, this should be done in conjunction with the U.S. Fish & Wildlife Service which is currently examining possible translocation sites -- see comment below.)

Page 5, para 3 Interpretive Programs: Although the Southern Sea Otter is now only a rare visitor to Pt. Reyes, we urge the Park Service to make a vigorous effort to inform the public of the important role the otter formerly played in the Seashore's coastal waters. While the sea otter is a tragic example of man's over exploitation, it is also a valiant survivor -- a symbol of hope that strict protection and wise management will bring about the recovery of this decimated population. We offer our help in developing programs and literature to better acquaint Seashore visitors with the plight of the Southern sea otter.

Page 5, para 5 We strongly support the statements, "...natural repopulation will be allowed in all areas. Where competition with abalone divers occurs the otter will be protected and be allowed to feed naturally." They uphold the spirit of the Natural Resources Management Plan for Point Reyes, which cites as its first Resources Management Objective:

"The resources of the Seashore will be managed and developed to perpetuate the quality of appearing to be a major piece of "untouched" California coastal landscape."

However, the phrase, "No attempt will be made to reintroduce this species in the park,..." should be omitted, and it is contradictory to another Resources Management Objective which states:

"Steps will be taken to determine the means and feasibility of reintroducing extirpated animal species."

Although translocation of sea otters to the Point Reyes National Seashore may be unlikely, it cannot be ruled out altogether. The U.S. Fish & Wildlife Service, in consultation with the California Department of Fish & Game, the Marine Mammal Commission, the National Parks Service and other interested parties, is currently preparing a Recovery Plan to restore the Southern Sea Otter to non-threatened

status and eventually to re-establish and maintain optimum sustainable populations in natural habitats within its former range in U.S. waters. As major oil tanker ports are located near both ends of the otters' current range, and as their entire range is bracketed by the two largest-nominated tracts in OCS Lease Sale #53, establishment of a breeding population in an area less susceptible to oil spills is under careful scrutiny, and all sites ecologically and biologically appropriate are under consideration. Sadly, however, we must note that Point Reyes itself is threatened by potential spills from tanker traffic heading for San Francisco Bay, as well as by the proposed off-shore oil development in the Bodega Basin.

Page 6, para 5 Change to read: If the sea otter should repopulate the Seashore, the ecology of the area would gradually change to resemble more closely the pristine situation of pre-fur trade times, when otters were present as an important ecosystem component. The sea otter has been identified as a "keystone species" with a significant ecological role in controlling the numbers and sizes of grazers such as sea urchins and abalones in kelp forests. Such control by sea otters results in enhanced kelp growth and an increased potential for kelp forests to support an abundant and highly diverse biota which uses kelp habitat for shelter and food, including finfish which are heavily utilized by man. While the otter will compete with man by reducing the number of legal-sized shellfish available, it will leave healthy juvenile populations and breeding stock. Eventual reoccupation by sea otters would add a new dimension to the educational, recreational and scientific attributes of the Seashore.

Question: We wonder what percentage of Seashore visitors would actually be affected by otters eating abalones? It is our understanding that abalone diving is already restricted in the Seashore due to the presence of sharks in nearshore waters and the protection of certain areas from human intrusion, i.e., the tidal zone fronting the Point Reyes headland. Also how accessible would the oysters be to the otters? Aren't they already grown in enclosures to protect them from other marine predators?

Page 7, para 3 See comment on Page 4, para 7.

Page 8, para 4 See comment on Page 6, para 5. The natural repopulation of the sea otter, while enhancing some marine animal populations, may reduce the number of legal-sized abalones, thus reducing potential harvesting for visitors. (Delete mention of observance, for few of the 41 different items on the otter's varied menu provide a visual experience for park visitors.)

Page 8, para 6 See comment on Page 6, para 5, and restate to provide a more balanced perspective of the otter's effect on the nearshore ecosystem. Suggest: "The only renewable resource that would be affected would be the nearshore ecosystem which would come to more closely resemble the natural equilibrium which formerly existed when the sea otter was the keystone species in the kelp forests."

Page 9, para 4 Change 2nd and 3rd sentences to read: "The sea otter is protected as a "Threatened Species" under the Endangered Species Act, and therefore preventing its reintroduction into the area would be in violation of this Act. The artificial reintroduction of the sea otter would hasten the return of the nearshore environment to a condition more closely resembling natural equilibrium, but would first require studies to determine whether such an artificial reintroduction would be in the best interest of the threatened Southern Sea Otter population, and what effect it would have on the Seashore ecosystem.

General Comments

Page 4, para 2 The sections on live and dead beached marine mammals should be
 " ", " 3 rewritten to indicate the differences in procedures followed for pinnipeds and cetaceans, and to clarify the statement that whenever possible beached animals will be observed for 48 hours before any action will be undertaken. Also, we believe first priority for carcasses should be their use by scientific and educational institutions, with second choice being natural decomposition or burning/burial if necessary.

Patricia Fe. is-Olson
2431 Lockwood Avenue
Fremont, CA 94538

August 20, 1980

Howard Chapman
Regional Director
National Park Service
Western Regional Office
450 Golden Gate Avenue
San Francisco, CA 94102

Dear Mr. Chapman:

On August 27, 1976 I submitted written commentary on the National Park Service's draft of the Natural Resources Management Plan and Environmental Assessment (June 1976). At that time I commended the Service for its endeavor. The Plan reflected a general concern for the natural environment. The steps outlined in the Plan were an attempt to maintain and restore the Seashore in a natural state. This document, however, was overwhelmingly directed towards the management of terrestrial and aquatic resources, in spite of the statement on page 3 of the Plan that, "the actions proposed in the natural resources management plan deal with the marine as well as the terrestrial environment". Management programs and research needs were not addressed for the marine ecosystem. It, therefore, is a significant step forward towards achieving the goal of maintaining and restoring the Seashore as an integral unit that a Marine Mammal Supplement has been drafted:

The lack of a policy for marine mammal management within the Park boundaries has impeded the Service from achieving its goals of managing and perpetuating the quality of all the Seashore's natural resources. The Marine Mammal Supplement will provide the Service with tools to manage the marine environment and to attain its objective "to protect, preserve, and interpret the marine mammals in the park" (Marine Mammal Supplement, 1980). However, to be most effective in achieving these objectives, some fundamental problems in the draft must be addressed and rectified. The lack of population data, unfounded or weak assumptions, and strategies dealing with live marine mammals and carcasses need to be dealt with prior to finalizing the management supplement.

It is imperative to have information on population size and on distribution and types of use by area of the Seashore by marine mammals before developing management programs. Marine mammal censuses can provide data on the status of local populations. Significant changes in these populations may reflect local conditions that can also have implications for other marine organisms and for man. Increased mortality rates may serve as an indicator of changes in the levels of pesticides, heavy metals, and bacterial infections. Population counts can, therefore, offer information on population trends, and in cases where negative impacts are noted, indicate where research needs to be conducted to ascertain and alleviate problems. In situations where populations become intensely concentrated, management decisions can be made to obtain information on the causes for population build-ups, potential impacts, and allow a reasonable determination of what action(s) is required. In addition to census data providing figures on the size of the population, it can indicate the distribution of animals and facilitate the regulation of human utilization

of areas.

The U. S. Congress, in the Marine Mammal Protection Act of 1972, legislatively defined wildlife conservation and management as "the collection and application of biological information for the purposes of increasing and maintaining the number of animals within species and populations of marine mammals...such terms include the entire scope of activities that constitute a modern scientific resource program, including but not limited to, research, census, law enforcement, habitat acquisition and improvement"(Poole and Trefethen. 1978. In Wildlife and America. Council on Environmental Quality). In addition to the mandates of the Marine Mammal Protection Act, most marine mammals are also protected and their management regulated by the Endangered Species Act of 1973 and the Convention on International Trade in Endangered Species. Because "knowledge is the essential prerequisite to making a decision" (Poole and Trefethen. 1978. Ibid.), it is imperative that all aspects of marine mammal biology and ecology be investigated prior to finalizing the management plan being developed for Point Reyes National Seashore. Investigations should be conducted on basic biology and ecology to ascertain minimum requirements for breeding, feeding and resting; human interactions; man-induced mortality both direct and indirect(including monitoring the habitat for pesticide, heavy metal and bacteria levels). This information can be collected through field observations and research, literature searches, and carcass analysis.

Stranding information and necropsies can provide important data on distribution, feeding and breeding behavior, causes of mortality including heavy metals and pesticides, and age/sex specific mortality figures. While there presently is no centralized data bank for information gathered on marine mammal strandings, every attempt should be made to collect basic information and to provide it to the National Marine Fisheries Service, Scientific Event Alert Network (Smithsonian Institution), and any academic or scientific institution interested.

Not until these points are addressed and incorporated will the management plan provide a minimum level of protection. It will then insure a continuing collection of data needed for long-term management decisions within Seashore boundaries as well as along the entire coast. To omit these recommendations will only perpetuate the status quo and allow these populations to go uncensused, and thus, unprotected from human harassment, environmental degradation, and possibly result in the decline of local populations.

Dr. Kenneth S. Norris, noted marine mammalogist from the University of California, Santa Cruz, has wisely pointed out that "wildlife management is largely a matter of human management"(Wildlife and America. 1978. Council on Environmental Quality). Often human-marine mammal conflicts can be simply avoided by putting restrictions on human use of an area on a daily or seasonal basis. Not all situations are so easily resolved. In instances, where potential or real conflicts require a more detailed consideration, the alternatives should be reviewed using current scientific information, pertinent laws, and other guidelines relevant to the management issue. Management decisions should be made with objectivity and not colored by biases that are a result of resource conflicts. The current draft is weakened through assumptions that the presence of marine mammals will result in negative impacts (eg. under the headings

Research Project Statements in Priority Order, Specific Management of Individual Species, Environmental Impact of the Proposed Action). This seems to be the case particularly for the sections relating to the sea otter. While the draft continually refers to the negative impact that otters will bring to abalone beds in the area, there is no mention of the positive ones that will also result. In the Natural Resources Management Plan and Environmental Assessment (June 1976), it was stated that "one reason for the decline in kelp abundance that may be attributable to the actions of man is the specific elimination of the sea otter from the habitat. The line of reasoning, in brief, is that sea otters eat-- among many other items--sea urchins; with the removal of sea otters, sea urchins multiplied far beyond the numbers for naturally balanced populations (emphasis mine); sea urchins chew off kelp near the base (holdfast) of the stipe ('stem"); with a substantial increase in the number of sea urchins, there is a corresponding decline in kelp stands" (pg. 28). It has been suggested by Palmisano and Estes (1976) that the sea otter represents a keystone species, as such, the return of the otter to Point Reyes would result in the reestablishment of conditions more similar to the nearshore community prior to the extermination of otters and allow for the maintenance of a "stable shellfish population in Seashore waters" (Natural Resources Management Plan and Environmental Assessment, 1976). As a National Seashore, management programs must be assessed to deal with the goals of "perpetuat(ing) the quality of appearing to be a major piece of 'untouched' California coastal landscape (Natural Resources Management Plan and Environmental Assessment, 1976), and providing recreation consistent with these and other objectives.

It has also been assumed that the presence of marine mammal carcasses will have negative impacts on visitors to Point Reyes National Seashore. It cannot be denied that some people find death objectionable or that carcasses may become particularly smelly, however there are others who realize that death represents an aspect of the natural ecosystem. Carcasses can be the site of temporary abundances of animal life including mammalian and avian predators and scavengers. The Seashore should not exert itself to remove carcasses in instances where public health is not a problem; instead the corpses should be used as a tool to describe ecological processes and stimulate discussions relating to mortality especially man-induced causes. It should be pointed out that carcasses provide a rare opportunity for people to get a close look at marine mammals. They also have aesthetic values as shown in the most recent Audubon Magazine, in which photographs of a dead gull and a vertebrae from a marine mammal are published (Audubon Magazine, July 1980, vol. 82, no.4).

If the preceding general and the following specific comments are incorporated into the Marine Mammal Supplement, they will serve to "enhance rather than adversely affect the resources" (Marine Mammal Supplement). Without addressing the need for more research on marine mammal biology and ecology; conducting actual studies on the local populations to obtain census, distribution, and mortality figures; collecting and disseminating carcass data; and analyzing this information objectively to establish a management program that meets the objectives of the 1976 Natural Resources Management Plan and Environmental Assessment and the Federal regulations pertaining to the marine mammals at Point Reyes National Seashore, the supplement will not serve to protect, preserve and interpret marine mammals in the park, will continue to impede the dissemination of information, and will avoid the responsibilities of habitat monitoring, law enforcement, and public education that are

necessary prerequisites for survival of local populations of marine organisms, not just marine mammals. They are important in providing continued enjoyment of these species by the public for this generation and those in the future.

Thank you for allowing me to submit these comments. Even though I commented on the 1976 Plan I did not receive this draft directly from the Park Service; this may be the result of the change of my address. The copy I have worked with had no due date, but I was told that comments would be received through September 1. The most recent copy I received lists a deadline of August 15, so I do hope that you will still accept and consider these comments. Please make note of my new address and place my name back on your roster for further mailings.

Sincerely,

Pamela Ferris-Olson

Pamela Ferris-Olson

cc: John Sansing
Marine Mammal Commission

- pg. 1, para. 4, line 3. Reference incomplete. Give the title and date of document or name of individual who provided this information.
- pg. 2, para.1, lines 9-11. References are again incomplete. Cite title of publication or individual responsible for the information.
- pg. 2., para. 2, line 2. The size of the local population, however... Clarification as to what population's size is unknown is needed because the preceding sentence refers to the local population, while the one following refers to the species.
- pg. 2, para 2, lines 2-11. Provide citation for this information. This section is poorly phrased and should be rewritten to insure clarity.

It should be pointed out that because declines are known to be occurring in the southern portion of the range and because Point Reyes National Seashore is in this zone that population censuses are extremely important for monitoring the local populations. This will be important in assessing programs initiated in an attempt to alleviate the factors attributing to decline. It would also facilitate future status determinations should conditions continue to worsen.

- pg. 2, para 3, lines 3-4. Information on breeding sites is important for determining geographic distribution and management of breeding areas at Point Reyes should they exist.
- pg. 2, para 3, lines 5-6. If the population has increased over the last 40 years, but growth has leveled off in recent decades, it is important to find out what is actually happening to population growth. Again, the number of animals is needed to allow monitoring of population status and to establish local management policies.
- pg. 3, para 2, lines 6 & para 3, line 7. Incomplete citation.
- pg. 3, para. 4, line 3. Appendix A of the supplement was not attached.
- pg. 4, para 2, line 1. This statement most likely refers to dead whales and, therefore should be clarified. The rationale for not wanting these large marine mammal carcasses to become beached should be included (ie. cost of removal, potential health risks, etc.). If this is indeed the intent of this sentence then it should be removed from the section on Live Beached Marine Mammal Action or else the section should be retitled.

It should be noted that in all other cases, National Park Service employees are not to become involved with preventing nature from taking its course and, therefore, tired or ill marine mammals will not be obstructed from coming ashore. The management plan should establish guidelines to help in the assessment of whether medical attention should be provided. Forty-eight hours could be critical for the survival of an unweaned pup, an animal with severe lacerations, or one entwined in netting. While there will be cases where no action will be needed (eg. molting individuals) a 48 hour grace period could well serve as the difference between survival or a needless death. Protection of the animal while ashore must also be

addressed. If an animal is to remain on the beach, with or without medical attention, it should be guarded to prevent predation, vandalism, and general harassment. To insure that no laws are broken and that the animal receives adequate attention, the Park Service should contact the National Marine Fisheries Service when beachings occur especially in the case of an endangered species, and the California Department of Fish and Game and the U. S. Fish and Wildlife Service if a live otter or a carcass of this species washes ashore. These agencies have experience in handling marine mammals and will know the protocol for relocating, rehabilitating, and properly disposing of them. In addition, a local veterinarian certified to handle marine mammals and endangered species should be identified and placed "on call" to offer medical assistance as the need arises. The Marine Mammal Center, located at Fort Chronkita, might adequately serve this purpose and offer speedy responses for consultation on such problems.

- pg. 4, para. 3, lines 3-11. This section is totally inadequate for the purposes of marine mammal preservation and management (see pg 2 of this letter). The primary goal should be the collection of data on every stranding. Information should be logged on the date and location of stranding; age, sex, and condition of the animal; and standard measurements should be taken. Tissue samples should also be collected. Therefore, a new priority #1 should be added stating that all carcasses will be examined to ascertain basic biological information (see Marine Mammal Supplement, pg. 7, para. 1, lines 7-8).

Priority #2 should be the disbursement of the carcasses to academic institutions or other agencies with approved permits. If local institutions do not want the entire carcass, the National Marine Fisheries Service and the Scientific Events Alert Network should be alerted so that other institutions at greater distances may be contacted to determine what portions of the carcasses should be salvaged.

Priority #3 as originally stated can only take place if these facilities are granted permits for the possession of marine mammal parts. This should be clarified with the National Marine Fisheries Service.

Priority #4 should be a combination of the priorities presently listed as #1 and #4.

- pg. 4, para. 4-7. As stated earlier (see pg 1 of this letter) the major research goal for the Seashore should be to conduct population censuses for pinnipeds; therefore, Research Project #3 should be given a ranking of #1, followed by the project currently given priority #1 (study of harbor seals).

- pg. 4, para. 5 & 7, lines 1 & 1. ...to determine the potential impact... should be replaced with, to determine the management implications. The Seashore's management objectives have already been stated to be those of managing and developing the resources to "perpetuate the quality of appearing to be a major piece of "untouched" California coastal landscape (and thus the)...diversity and contrast...will be maintained..." (Natural Resources Management Plan and Environmental Assessment, 1976). The fact that the sea otter as well as the other marine mammals mentioned in the Plan "are native to the seashore

and formerly occurred here in good numbers is well known" (Natural Resources Management Plan and Environmental Assessment, 1976). The Service should therefore be concerned with analyzing effective management for the species as they return. It does not appear to be within the National Park Service's goals to obstruct their return but only to mitigate impacts through wise and objective resource management policies. This also is consistent with the Specific Management of Individual Species section under which it is stated that "natural repopulation will be allowed in all areas". More importantly it is stated that "where competition with abalone divers occurs the otter will be protected and be allowed to feed naturally" (Marine Mammal Supplement, 1980). This is a statement of policy and should, therefore be made clear throughout the plan. Thus any research to be conducted by the National Park Service should facilitate management of marine mammals and mitigate potential and actual conflicts.

pg. 5, para 4, lines 1-3. If the Seashore's administration has jurisdiction over the water beyond the terrestrial boundaries, then the Administration should be responsible for harassment of whales by fishermen, divers, and boat traffic. Actual enforcement could be attained through a cooperative agreement with the Coast Guard and should extend to all marine mammals in the water offshore of Point Reyes National Seashore.

pg. 5, para. 5, line 1. The U. S. Fish and Wildlife Service and the Marine Mammal Commission in cooperation with local authorities and other federal agencies will decide where reintroductions will occur, therefore, this supplement should not close the door on possible translocations to Point Reyes National Seashore. Change sentence to read, No attempt is being currently considered...

pg. 5, para 2, line 1. It is unclear why the continued survival of an individual will impact the environment, after all it had been a part of the marine ecosystem. If this statement implies a negative impact due to the use of resources, then a study would have to be conducted to show that the animal was actually having a significant affect on the system. Another question raised here is how it was determined that a beached mammal has a greater chance of survival. It would be best to omit this sentence or at least clarify and justify these points.

pg. 6, para 2, line 4. This decomposition may have (see pg.3 of this letter).

pg. 6, para. 3, line 1. ...environmental impacts of their own,

pg. 6, para. 5, line 4. It should be noted here that the abalone will not be wiped out and will exist in populations more closely resembling the "untouched" California coastline. In addition, kelp beds may return in greater profusion and facilitate the reestablishment of other invertebrates, fishes, birds, and marine mammals that benefit from this association.

pg. 6, para.5, lines 4-5. It is unclear just how vulnerable the oysters are

to sea otters. Since they are cultivated in cages and grown in a protected area, fencing should adequately preserve the oysters from otter depredations. If this is the case, the only affect further fencing would have would be to increase monetary expenditures. Fencing has additional benefits because it reduces depredations by other large marine organisms.

pg. 6, para 5, line 5. The sea otter is not a colorful mammal (ie. pelage is not multicolored), however, its behavior might be so described.

pg. 6, para. 7, line 2. ...to be observed by park personnel...

pg. 7, para. 1, line 5. This will reduce...

pg. 7, para. 3, line 1....to determine the management implications of...

pg. 9, para. 5, line 3. The sea otter was listed as a "threatened" species under the guidelines of the Endangered Species Act of 1973 in January 1977.

pg. 9, para. 5, lines 5-8. Again the positive aspects are overlooked (see pg. 3 of this letter).

pg. 9, para. 4, lines 2-3. It is hard to image that the shellfish consumed by sea otters have high visibility. Certainly, the establishment of kelp beds and the association of bird and marine mammal life is more visible from land than abalones, sea urchins, etc. As for the divers, otters do help to enhance the environment for other invertebrate species and fish, so that underwater experiences only change in quantity and species of marine animals not in absolute terms.