

POINT LOBOS RESERVE  
MASTER PLAN REPORT

Olmsted Brothers  
November, 1935

Part III

SPECIFIC RECOMMENDATIONS FOR PRESERVATION AND UTILIZATION

# Table of Contents

## ~~INDEX TO PART III.~~

Subdivision	Page
Section A. The General Objectives in the administration of the Reserve;-	1
1. Preservation.....	2
2. Utilization.....	1
Section B. Preservation.....	2
1. Fire. . . . .	2
(a) Minimizing the sources . . . . .	2
(b) Minimizing the presence of combustible materials . . . . .	5
(c) Fire-proof zones . . . . .	6
(d) Prompt discovery and extinguishing of fires . . . . .	7
2. Visitors . . . . .	10
(a) Wanton damage . . . . .	12
(b) Wear and tear . . . . .	14
(1) By Automobiles . . . . .	14
(2) By horses . . . . .	16
(3) By tramping of people . . . . .	17
"exclosures" . . . . .	24
3. Damage by Administrative Employees . . . . .	27
(a) By Motor Equipment . . . . .	27
(b) In other ways . . . . .	28
Section C. Utilization: "Improvements" which are not justifiable in order to provide for utilization. .	30
1. Roads and Parking Spaces . . . . .	30
(a) Locations for unloading places with parking. . . . .	32
(b) The permanent road system . . . . .	35
2. Trails . . . . .	47

Contents of Part III

Subdivision	Page
3. A dependable water supply . . . . .	49
4. Sanitary facilities . . . . .	51
5. Problems of picnicsm bathing, boating and related activities . . . . .	52
(a) Picnics . . . . .	52
(b) Bathing . . . . .	57
(c) Boating . . . . .	57
6. Other Service Facilities Including Buildings . . . . .	60
(a) Headquarters Service Group . . . . .	62
(b) Supplementary Service Area, for <del>ser</del> storage etc. . . . .	63
(c) Experimental Nursery . . . . .	65
<del>(d) "Reference Library" or "Museum" . . . . .</del>	<del>67</del>
(d) Educational <del>Service</del> /Facilities . . . . .	67
7. Certain Manipulations of Vegetation, necessary of permissible as means to proper Utalization of the Reserve; the Dangers the thereof; and the Limitations which should control them. . . . .	73
(a) Removal and Shifting of Vegetation Dead or Alive. . . . .	74
(b) Planting, and related Positive Con- trol of Vegetation for Effect on Landscape. . . . .	78
(1) Protective "Buffer Zones" boardering a Natural Preserve. .78	
(2) <i>Within the Reserve Proper. . . . .</i>	<i>83.</i>

### Part III. SPECIFIC RECOMMENDATIONS

Reasons for the various items below, and explanations which are important to their proper interpretation and application, are to be found in other parts of this report and in other accompanying reports on special aspects of the Reserve.

Sec. A. THE GENERAL OBJECTIVES in the administration of the Reserve are:-

1. Preservation: to protect and perpetuate those physical features and conditions of the Reserve which contribute to its important and peculiar values; and to do this as perfectly and completely as possible consistently with reasonable use of the Reserve by visitors in the manner indicated below.

2. Utilization: to arrange for the use of the Reserve by visitors in such ways and under such conditions as are likely, in conjunction with the protective measures above indicated, to enable such visitors to derive from the Reserve, in the long run, <sup>the greatest</sup> continuing values which it is capable of giving them.

Preservation is, in the last analysis, important from a human standpoint only as a means to utilization. And theoretically it can be argued that where requirements for preservation and requirements for utilization conflict

the latter are of ultimately controlling importance. Practically, as a fundamental administrative policy in this case, controlling importance must be given to requirements for preservation for a very compelling reason.

The reason is that the physical features and conditions here inherited from the past, on which depend the greatest values derivable from the use of the Reserve now and hereafter, are in general very vulnerable, very rare, and positively irreplaceable if destroyed or seriously injured. Therefore any inadequacy in preservation threatens irreparable losses in use-values for all time. Other mistakes are correctible and involve only temporary losses. Human judgment being fallible both in regard to the requirements for adequate preservation and in regard to wise utilization, it follows that in all cases where there is conflict between what seems desirable for the sake of more perfect preservation and what seems desirable for other reasons, and where there is any reasonable ground whatever for doubt as to a wise decision, the doubt should be resolved in favor of more perfect preservation.

Sec. B. PRESERVATION:

The dangers against which it is most important to provide systematic protection, either because of the imminence of the danger, or the seriousness of the damage which it threatens, or both, may be grouped under three heads: Fire, Damage by Visitors, Damage by Administrators.

1. Fire. The conditions in regard to fire risk in the Point Lobos Reserve are in some respects peculiar; and require correspondingly specialized methods of fire-protection.

(a) They are not very peculiar in respect to the first line of defense against fire damage, that of minimizing the sources of fire.

Deliberately kindled fires, for cooking or other purposes, are and should always be absolutely prohibited anywhere on the Reserve except at a very few designated fireplaces involving a minimum risk of the spread of fire from them. Picnic fires have hitherto been authorized at designated fireplaces on certain beaches and rocks along the south shore and also at certain neighboring places above the bluff more or less surrounded by combustible material. The risk through failure of visitors, in disregard of rules, to be careful in the use of fires and in completely extinguishing them before departure, is so

serious in the latter cases that they should be discontinued and no others introduced. Under some conditions of wind and dryness the risk from the shore fireplaces is serious. The fireplace picnic is a use of distinctly secondary value in this Reserve, and for reasons discussed elsewhere it is desirable to eliminate it entirely from the area south of Carmel Cove; very certainly so in case the proposed extension northeast of Carmel Cove permits its transfer to that locality.

The chief source of fires is, and will remain, the carelessness of smokers. Education of the public and official prohibition of smoking at times of special fire hazard are important here as elsewhere and will help. But at best fires are sure to start from this source and are liable to start anywhere. Temporary prohibition of smoking when conditions favor spread of fire is an accepted practice; but its value depends entirely on two things: first, that the Warden shall recognize it as a duty, in which he will be supported by his superiors, to put the rule into effect whenever the conditions are not clearly safe, without waiting for those combinations of high wind with dryness which involve extreme fire risk; and second, that there shall be sufficient watchfulness over what people are doing throughout the Reserve

to make the rule reasonably effective. Posting the rule is not enough unless the Warden or a deputy is free to leave the gate lodge for frequent and thorough patrols.

(b) In respect to the second of the standard lines of defense against fire, that of minimizing the presence of combustible materials, the conditions are peculiarly difficult. The fact must be squarely faced that, except in a few closely limited cases mentioned below, resort to this most effective and certain of all fire-prevention measures would be directly destructive of the very values for which protection from fire-damage is needed.

Apart from areas which are of necessity bare of combustible materials, such as exposed rock, beaches, and roads, the ground is clothed with vegetation constantly producing combustible material, living and dead, which when dry is highly inflammable. Any appreciably effective reduction of the risk which these accumulations present, by "cleaning up" of dead wood and removal of long grass and litter by cutting, raking, burning, etc., such as is prescribed by common-sense in dealing with ordinary parks and forest resorts much frequented by the public, would radically impair the natural conditions on which the distinctive values of this Reserve depend. Even a little "cleaning up" at all generally



applied would seriously hurt these values long before it was enough to effect an appreciable percentage reduction of the fire risk. The danger to the values of the Reserve from permitting any discretionary "clean-up" of dead wood and natural litter as a fire-protection measure is greater than the danger it would avoid.

The constant production and accumulation of very combustible material is just as essentially part of the business for which this Reserve is being operated as it is in the case of a powder-factory. And it is just as essential here to rely entirely upon other methods of preventing ignition and spread of fire, instead of eliminating that material.

(c) A third standard fire-protection device, that of limiting the spread of fires by relatively fire-proof zones separating one combustible unit from another, as in a powder factory or an economic forest, is practically interdicted here except in so far as roads, trails, and other fire-proof areas are required for other reasons; because such fire-lanes, if made sufficiently wide and kept sufficiently fire-proof to be really effective, are themselves grossly destructive of the natural conditions on which the values of the Reserve depend, and also because the economic cost of their

maintenance in a highly effective condition if applied to other methods of fire protection (a and d) will give greater safety as well as less incidental damage to the natural values.

(d) The final and most important line of defense against fire-risk is prompt discovery and extinguishing of fires. Like the first, this demands systematic and adequate watchful patrol of the Reserve by the Warden and/or deputies, not tied down to post-duty at the gate or elsewhere. And equally it demands quick and certain extinction of fire upon discovery.

The requirements are well illustrated by the fire which burned a few acres in the autumn of 1935, by good luck in a meadow area only recently redeemed from cultivation instead of in a place where the damage would have been calamitous. Most of the area was burnt before the fire was discovered and the Warden could begin to attack it: pointing to the need of continuous patrol and quick commencement of control. A considerable spread took place after fire fighting by the Warden and locally available men began; because with only knapsack tanks and hand-tools even the considerable number of men who happened then to be locally available made rather slow progress in checking the fire on a relatively wide front. But on the arrival of the tank-truck from the Carmel Highlands Fire Department, notified by telephone as soon as the fire was known at the gate-lodge, an effectively large stream of

water, skillfully applied, stopped the fire within less than a minute on a circuit of about 900 feet. The fire truck and crew of the State arrived from Monterey after the fire was out.

The lesson is very clear. The values at stake are too great to risk the amount of burning that is liable to occur through reliance on apparatus called in from elsewhere and possibly occupied at another fire, or on the accidental availability on the spot of a sufficient number of men to control a fire promptly with hand-tools and without special training. The Warden of the Reserve ought certainly to have on the premises at his instant command at all times a tank-truck, with sufficient hose to throw a powerful stream on a fire in any part of the Reserve without delay; and should be trained in the most efficient use of such apparatus.

To enable such apparatus to be brought to bear promptly on any fire requires, in addition to the use of permanent roads otherwise necessary, that the truck should be able to penetrate within effective hose-distance of areas not reachable directly from the roads. The topography makes this possible without building special service roads to scar the landscape and without excessive damage to the

natural vegetation provided certain routes are kept sufficiently free from obstruction by trees and large bushes to permit the truck to use them when need arises, and provided the driver of the truck knows just where these obscure but always practicable routes are and by which of them he can best get his truck in position to attack any given fire even if it in a place topographically inaccessible to the truck itself. Both for speed and for guarding against needless damage to the vegetation when driving a fire truck off the regular roads, great importance must be attached to this intimate specialized knowledge of the Reserve and respect for its values on the part of the fire-truck driver; which is still another reason for stationing such a truck on the Reserve as part of its regular equipment and having the Warden and at least one deputy thoroughly trained in its ~~use~~<sup>use</sup> under the special conditions of the Reserve. It is also important, to avoid loss of time in refilling the tank of a truck, that there be an ample supply of water quickly and conveniently available at one or more central points within the Reserve.

(End of sec.B. 1.)

2. Visitors. The admission of visitors to the Reserve, necessary to obtain value from it, unavoidably involves some damage by them to the natural conditions which make it worth visiting. This damage is most directly and chiefly to the vegetation, less avoidably to the animal life, and, mainly by producing abnormal erosion and other harm to the soil as a consequence of interference with the protective vegetation. Indirectly, damage is caused by the presence of visitors through inducing administrators to do things, in coping with problems raised by their presence, which in small ways or in large ways alter natural conditions and substitute for them something more or less conspicuously artificialized.

No matter how small the damaging effect upon the natural conditions of each of these human actions, their cumulative effect in the course of time would, in the absence of restorative processes completely offsetting them, inevitably make the Reserve so worn out, so unnatural and so artificialized as to be no longer worth visiting for the purposes which alone justified its acquirement.

Natural restorative processes are at work continuously, of the same general character as the processes

which originally produced the conditions that made the Reserve worth visiting and worth preserving, through actions continued over countless aeons in the past. But these processes are in general very slow, from a human standpoint. These slow processes of nature, especially those of the vegetation, <sup>not too much</sup> if/unbalanced by human interferences (as in the case of starting abnormal soil erosion through disturbance of vegetation) and if not neutralized by too frequent repetition of the direct damages, tend constantly to obscure and ultimately obliterate most of the damages inevitably done by man and to re-create conditions approximating what will give the greatest possible value to visitors.

The fundamental problem in the administration of the Reserve, to which everything else is secondary, may therefore be stated thus. First, in order to avoid indefinitely advancing depreciation of the value of the Reserve, a balance must be attained by which the damaging processes (largely controllable by administrative action) shall never accumulate effects from year to year or decade to decade, at a rate exceeding by the slightest degree the rate at which the natural processes of recovery (largely unhastenable by any human action) can fully and completely overcome them. Second, not only must such a balance be maintained in order to fix any limits to progressive

depreciation of the Reserve, but it is of the utmost importance to establish that balance at as high a level of natural values as possible, instead of accepting a relatively worthless, "shopworn" and artificialized condition as a permanency.

The damages directly due to the actions of visitors are roughly divisible into two groups; on the one hand incidental wear and tear, mainly as a result of locomotion, on foot and otherwise, and that largely in pursuit of wholly legitimate and appropriate satisfactions, such as it is the justifying purpose of the Reserve to provide; and on the other hand wanton damage, thoughtless or deliberate, through actions quite unnecessary to the greatest enjoyment of what the Reserve has to offer.

(a) The wanton damage is practically confined to consciously removing, displacing or otherwise meddling with plants, animals, or other natural objects (e.g. purloining cypress seedlings and other plants and parts of plants, gathering shell-fish, gathering fire-wood, and occasionally mutilating or otherwise disturbing natural objects for some obscure selfish motive not of a possessive kind). The general rules of the Reserve should forever absolutely prohibit visitors from removing or disturbing any plant, animal or natural object whatsoever therein; with definite provision, however, for two possible exceptions and no others.

The first exception is that it will be desirable, in rare cases and after proper investigation of each, to issue special personal permits for the taking of specimens on the Reserve for limited scientific purposes peculiarly associated with the Reserve, a permanent record being kept of each permit and <sup>of</sup> the results thereof. The second possible exception is the issuance of revocable personal permits to fish with hook and line from stated parts of the Reserve, permanent records again being kept of these permits and of the behavior of the permittees. There are obvious reasons why the taking of fish by hook and line might be an exception to the general rule of complete protection of the animal and vegetable life proper to the Reserve. The reasons for the close regulation of fishing, if it be permitted at all, is that fishermen have in the past done a great deal of incidental damage to the Reserve by trampling shore plants and causing bad erosion of soil in conspicuous places where any possible recovery of natural conditions is bound to be extremely slow, and have frequently left disgusting deposits of offal, papers, and other rubbish.

But the best of rules will do little toward minimizing wanton damage without two other things, which should go constantly hand-in-hand, viz., friendly education of visitors toward interest in and respect for its natural



features and understanding of the purpose of the rules, through tactful personal efforts of the Warden and his deputies as well as in other ways; and watchfulness of the behavior of visitors and firmness in securing faithful observance of the rules. Again, as in the case of guarding against fire, adequate and alert patrolling is essential.

With the provisions above noted wanton damage is likely to be negligible in its effect. But if, at any period, either because of insufficient funds to pay for supervisory personnel or because of incompetency of that personnel or otherwise, wanton damage by visitors should be found to be definitely and continually exceeding the rate at which such damage can be offset by natural restorative processes, it would be better to close the Reserve to the public in whole or in part until those conditions can be remedied, rather than allow serious depreciation to go on unchecked.

(b) Damage by incidental wear and tear presents a much more complicated and perennially difficult problem.

(1) By automobiles. An automobile driven once anywhere in meadow or woodland makes relatively conspicuous artificial marks, which are immediately and appreciably injurious to the naturalness and the beauty of the Reserve, which suggest to visitors a general disregard of self-restraint

against injuring natural conditions, which are only slowly obliterated ~~by~~ recovery of vegetation, and which are very readily perpetuated and progressively accentuated if the tracks are followed by other cars even at long intervals of time.

The only feasible safeguard is to provide well-defined and well-kept roads and parking spaces in those locations where it is really important that automobiles should be allowed to go, and confine them strictly to those places. Plans for such roads are discussed in Section C. It is believed that <sup>with</sup> such roads and with a rule against driving off them and reasonably effective patrol, there will be very little temptation to visitors to violate the rule when the old marks of reckless random driving in disregard of natural conditions have ~~become~~ effectively obliterated. In a very few places permanently, and in others temporarily pending that condition and the gradual education of visitors (and public employees) to reasonable self-restraint, it will be necessary to install, where indicated by experience, positive physical barriers to the passage of automobiles, the most generally applicable being small logs raised above the ground on stones just sufficiently to "hang-up" an automobile that attempts to bump over it, and too firmly fastened down to be readily removed. These are normally

Preferable to artificial barriers of stone not otherwise required, or artificial ditches or dykes, because expressive of the relatively temporary nature of the barrier; and there should be frequent watchful experimenting with the removal of such barriers here and there in order that they may not be retained when no longer really needed.

(2) By horses. The amount of riding in the Reserve seems likely to remain so small as to cause a negligible amount of damage; provided it is strictly excluded, as it should be, from the North Headland Preserve.

The impressions derivable from riding in the rest and shore of the Reserve, viewing the landscapes of woodland and meadow/ from the elevated position of an equestrian, are so strikingly different from those obtainable on foot and by automobile, and so interesting, that it would be very undesirable not to permit them. If, however, the number who use this now very exceptional method of enjoying the Reserve should considerably increase, the damage by indiscriminate riding might become serious enough to require~~ment~~ confinement of riding to well-defined trails; as a preliminary to which it would, of course, be necessary to determine by careful and comprehensive planning just where such trails, both for riders and pedestrians, should be provided in the southern and eastern parts of the Reserve for which no complete system of trails is now thought necessary. (See (3) below)

(3) By the trampling of people. Generally, in large parts of the Reserve, almost everywhere except in the North Headland Preserve and near the Shores, the damage caused by people walking at random in the pine-woods and meadows is practically negligible unless repeated on the same route with considerably frequency so as to produce perceptibly foot-worn paths. And even such paths in their earlier stages of development and unless they become very numerous or occupy exceptionally unfortunate locations, are less offensive evidences <sup>of artificiality</sup> and produce less serious indirect effects on the surrounding vegetation than even a much smaller number of deliberately contrived paths artificially constructed with the aid of tools. Moreover the damage they do is in general rather rapidly and completely overcome by the natural growth of vegetation when travel is diverted from them before they have become deeply worn.

As a general policy, therefore, and except in the very important special cases discussed below, people should be permitted to ramble freely at will subject to the rules against wanton damage; and deliberate construction of trails should be avoided unless and until, contrary to present expectation, progressively increasing signs of serious wear and tear from this source become evident.

In that case there should be a careful reconsideration of this policy, and only if it shall then be found wise to alter it definitely in certain ways, and in accordance with a comprehensive and detailed plan, should definite trails be laid out, or any paths be constructed or artificially "improved" or an attempt made to confine pedestrians (or horseback riders) to regular trails in the area south and east of the North Headland Preserve and inland from the shore path.

This general policy is not applicable to the immediate vicinity of the shores or to the North Headland Preserve, for two reasons: There is greater concentration of foot travel there because of the concentration of interesting features, and the natural conditions are far more vulnerable to serious injury by trampling.

Along the shore margins, because of the general steepness of slopes, thinness of soil, tenderness of much of the vegetation, its slowness to recover from injury and its peculiarly interesting and beautiful natural characteristics, even apart from the reasonable tendency of the public to concentrate near the

shores, there has been seriously destructive wear and tear by trampling, producing in many places a shabby artificialized appearance, causing rapid erosion and drying out of soil and exposure and injury of roots of trees above. Here it is essential to have sufficient paths to meet the reasonable needs of the public for movement, kept in such condition as to withstand concentrated wear with the least possible injurious effect on surrounding conditions while themselves offering the least conspicuous evidence of artificiality that is practicable, and to confine the movement of the public to these paths as closely as possible.

The movements of visitors within the shore margin are of two main sorts. One develops a more or less continuous path near the edge of the shore declivity, necessary to adequate enjoyment of the Reserve, relatively unobjectionable and fit to be perpetuated with minor modifications in detail. The other consists of scrambling up and down the slopes between this path and the bare rocks and beaches below and is extremely destructive.

Except at a few places on Cypress Point and in connection with picnic locations on the south shore, by far the greater part of this latter kind of damage appears to have been due to fishermen. Prohibition of fishing within the North Headland Preserve, now in effect, should be permanently enforced, and will remove the chief cause of this damage.

But three other protective measures are important.

One is to provide, at carefully selected places, both within the North Headland Preserve and elsewhere, a reasonable number of convenient paths, in some cases necessarily including steps, connecting the main long-shore path with the bare rocks and beaches below, so that visitors can get to and from the latter without doing serious further damage.

The second is to stop the intrusion of visitors on the very vulnerable areas intervening between such paths, in order to permit recovery of the natural vegetation. So long as any of these areas shows evident signs of having been much trampled on by previous visitors it will be very difficult, even for the most well-disposed and orderly people, to resist impulses to walk on to it or across it when attracted to do so by anything that interests them, unless there are considerable physical

obstacles in the way which make it the line of least resistance to remain on the designated paths. In fact it may often be difficult for people of the best intentions to know which of the more or less obviously foot-worn places that they see are intended for continued use as paths and which represent old wounds in process of recovery, where the slightest new disturbance is like ~~the~~ tearing at a slowly healing sore. It would have a deplorably artificializing effect on the appearance of the Reserve to protect such areas either by conspicuous permanent physical barriers effective against willful intrusion in the absence of guardians, or by making<sup>the</sup>/approved trails so conspicuously differentiated from their surroundings by various artificial "improvements" that no law-abiding visitors could inadvertently depart from them. But pending recovery of approximately natural conditions of vegetation that will command respect from well-disposed people, together with some further education of visitors in self-restraint, experimental temporary barriers and warnings will be necessary at a good many places. The price of their artificiality, for a time, is justified wherever less objectionable means are insufficient to permit such areas to recover; but there should be a constant endeavor to minimize their



number and their conspicuousness. Notes as to locations and types of such barriers, especially within the North Headland Preserve, will be found elsewhere. (See Appendix, Page 2.

The third is to arrest by artificial means, in a few exceptional cases, the continuing damage to natural conditions by gully-erosion and other natural processes abnormally initiated or accelerated by previous human wear and tear: sometimes merely by diverting concentrations of surface-water, sometimes by installing buried culverts or drains, sometimes by placing riffles of stakes and brush or rarely of stone to check and hold the wash enough for vegetation to reestablish itself, and very rarely by artificially replacing eroded soil. Such cases occur not only on the shore slopes but occasionally elsewhere, as on steep slopes where wheel-ruts or other artificial interferences have started gulleys and at the great sand blow-out <sup>on the approach</sup> to Seal Rocks Point initiated by the construction of a movie-set. Every such artificial operation for "assisting nature" to repair the effects of human wear and tear inevitably involves the introduction of new artificial features; and there is so much danger of making the remedy worse than the disease, in the conspicuousness of its artificiality, and in its possibility of starting new chains of disturbance, that no such remedial operation should be

undertaken except in cases specifically approved both as to the need for further interference and as to the method of such interference by a group of advisers representing a wide range of knowledge. (See list of such operations now proposed, Appendix, Page 11.)

Wherever there is reasonable doubt as to the advisability of any such remedial measure it is safer to omit it or rather <sup>to</sup> postpone it indefinitely and to watch closely the trend of changes in the absence of any further artificial control so that in case such trend clearly demonstrates the wisdom of interference it can be deliberately approved and undertaken before it is too late to make it effective.

In the North Headland Preserve, as outlined on the map, special protection from wear and tear is required throughout, and not merely on the steep shore slopes. In general the public should be urgently requested in this area to keep to the permanent established trails (See recommendation for modifications and improvements in existing trail system below, Appendix, Page 6); and should be persistently educated as to the need for such self-restraint.

Occasional divergence from the trails is unlikely to cause serious damage (if the exclosures discussed below are respected), and will be important to certain visitors in

order to obtain the full values legitimately available from the Reserve, especially in the case of painters, photographers, scientists and others who need for special reasons to occupy positions off the lines of established trails. It is probably desirable, therefore, to provide in the rules for issuing free permits on application to the Warden for departing from the trails in the Preserve elsewhere than within the exclosures. The mere mention of such permits in the rules would tend to keep others more closely to the trails, and reduce their tendency to follow the example of the few who have legitimate reasons for departing therefrom.

From certain areas, listed as "exclosures",  
Appendix, Page 7.  
(See       ), some intended to be permanent and some temporary, persistent and systematic effort should be made to exclude the public entirely. Only by cautious experiment is it possible to determine just how this can best be done to an effective degree with the least possible obtrusion of artificial barriers upon the attention of visitors. The landward boundaries of the exclosures are rather generally thickety; and where indiscriminate "clean-up" operations in the recent past have opened them up so as to invite entry cautious replacement of fallen limbs and brush can, if skillfully done, make them less

inviting without suggesting artificial barriers. But this alone is insufficient because a very small amount of wear and tear would defeat the purpose of the exclosures. It seems necessary to install some definite artificial markers along much or all of the traversable boundaries of the exclosures, such that no one can enter upon them inadvertently. The least objectionable device that seems likely to be effective is a continuous heavy wire, or light wire rope, supported on posts generally waist high or less, and so far as possible placed in thickets and brush so as to be unnoticeable from any regular path, with very small durable signs securely hung on it at frequent intervals, and clearly legible on close approach, preferably of enamelled metal, reading somewhat as follows:

"STOP. No one is permitted to enter this special test exclosure. To do so is liable to ruin the results of a scientific investigation of great importance."

The large area embracing the flattish top of Whalers Knoll and its southerly slopes has been so little frequented by the public in the past that there are hardly any distinct foot-worn trails traversing it, so that unless trails are deliberately formed or an exception is made to the rules therein/its inclusion in the Preserve where the public is requested to keep to the trails would debar law-abiding visitors from entering it. Yet there is much of interest there, especially the views from the top and at times notable displays of wild-flowers,

and it seems unnecessary and inexpedient thus to debar the limited number of people who would otherwise take the trouble to climb the hill. More than one reasonably defensible course of management is open as to this area. To exclude it from the boundaries of the North Headland Preserve, so as to make wandering in it permissible at will, would leave it technically legitimate for horseback riders to go up onto that part of Whalers Knoll, which is perhaps not serious; and it implies a physical definition of the boundary of the Preserve along the northerly limit of the plateau, where it would be very difficult to run any sort of effective marker without making it unpleasantly conspicuous in the fine plunging views at many points.

Probably, a better solution will be to include this area within the North Headland Preserve, as shown on the Master Plan (Plate I), and to place in the rules for the use of the Preserve an exception to the general rule asking people to keep to the trails, specifically excepting from that provision the flattish top and southerly slopes of Whalers Knoll. There would, at least for the present, be no definite continuous trails provided, although it would be desirable to maintain artificially certain openings through the frequent natural barriers of bushy growth, so that the occasional ramblers into this area might get through without breaking down the bushes

and without serious inconvenience to themselves; these openings conforming to lines which would be suitable for permanent and continuous trails in case these are ultimately required. The latter seems at present the wiser course; and the plans will indicate the prospective trail lines along which, for the present, no artificial work is proposed beyond the removal from time to time of intruding bush growth actually obstructive to passage.

3. Damage by Administrative Employees.

(a) By Motor Equipment. During the past year or so more damage, of a wholly unnecessary sort, has been done to the natural conditions of the Reserve by <sup>the</sup> careless use of motor equipment than has been done by the automobiles of visitors. Employees of the Division of Highways, for example, when working the roads with scrapers have repeatedly scarred adjoining areas by using them to turn their apparatus around, presumably to save time and trouble. Even employees of the Division of Parks have apparently felt free to drive cars on the meadows or in the woods as convenience in doing their work suggested.

Any scar so produced, even though slight, is not only directly damaging to the Reserve but is <sup>a</sup> direct temptation to visitors to drive off the roads wherever they feel inclined to do so. It suggests a deplorable lack of proper respect for the natural conditions, on the perfection of which the whole value of the Reserve depends.

Wheeled vehicles in the service of the State should be required to avoid departure from the approved roads even more meticulously than those of the general public, and no exceptions should be tolerated other than on specific orders of the Warden in cases of clear necessity, of all which cases a complete record should be kept. These cases

will occur when fires occur at places not effectively controllable otherwise, and when necessary construction or repair or maintenance work outside of road limits makes it unavoidable, and not merely a matter of somewhat greater convenience. But in the latter class of cases pains should be taken to do the work in such a way as to leave the least possible traces.

The ground beyond regular road edges ought to be in a condition of such immaculate perfection of naturalness that any reasonably appreciative and well-disposed person would shrink from driving a car on it as much as he would from driving across a private flower garden or making ruts in a well-kept lawn. Its condition can hardly approach that perfection unless the administrative personnel habitually thinks of it in that light as something deserving great respect. Habits derived from treating "unimproved" land and what grows upon it as so much raw material to be used, or used-up, in any way that serves one's immediate convenience, are hard to overcome; but they are terribly dangerous to the real values of this Reserve.

(b) In other ways. By far the greatest danger of damage to the natural values of the Reserve lies in making unnecessary and ill-advised "improvements", and in making



unavoidable artificial changes in ill-advised ways. Such deliberate manipulations of physical conditions on the Reserve as appear to be expedient are discussed in Section C.

Broadly, it may be said that there is vastly more danger of impairing the value of the Reserve by doing things to it than by not doing things to it; that every artificial "improvement" no matter how clearly desirable in some respects is certain to depreciate the value of the Reserve in other respects; and that the adverse effects upon the basic natural values are so apt to prove excessive in subtle, indirect ways very difficult to forecast, that every idea for doing something to the Reserve, however good it seems on the face of things, and however it originates, ought to be subjected to the closest scrutiny from many points of view. The presumption is always that it will prove more injurious than it seems.

Sec. C. UTILIZATION: "Improvements" which are and are not justifiable in order to provide for utilization.

1. Roads and Parking Spaces.

It is indisputable that the Reserve can be far more perfectly enjoyed by people on foot than is possible from automobiles. And the admission of automobiles to the Reserve unavoidably impairs its basic natural values: (1) by the mere presence in the landscape, to any conspicuous degree, of these machines which are so insistently expressive of a highly mechanized and artificial civilization and are so intimately associated for everybody with habits and ideas distinctly incongruous with what makes the Reserve inspiring; and (2) by the permanent artificial scarring of the natural landscape with roads and parking spaces.

Nevertheless the admission of automobiles is clearly justified, under certain limitations, for two important purposes. In the first place, the distances from the entrance gate to the most beautiful and interesting places in the Reserve are so considerable that some people can not, and many will not, readily walk them even when they know and highly appreciate the values to be obtained by going to them. In the second place many people previously unfamiliar with the Reserve but capable of

obtaining very great values from its characteristic features will not take the trouble to explore its more delightful parts on foot unless without leaving their cars they are given by their own eyes some strongly appealing suggestion of the values obtainable by a moderate extraordinary/amount of such exploration. They have been too often disappointed by other localities for which exaggerated claims are made, and are too reluctant to leave their cars and walk except under strong inducement.

The prime function of roads in the Reserve is therefore a double one: to enable visitors to drive within reasonably easy walking distance of places highly deserving of exploration on foot but not penetrable by automobiles without serious depreciation of their <sup>scenic</sup> values; and, so far as possible without such depreciation, to give visitors in cars such foretaste of those values that if appreciative of them they will not be apt to depart in complete ignorance of what they are. A further function is to make available for enjoyment without leaving one's car certain features of the Reserve which can be so enjoyed in relatively high degree and without serious damage to the Reserve, notably the sweeping views of surf and coastal landscape along the open south shore.

These considerations point to the following needs:

(a) the provision of certain unloading places whence exploration on foot can conveniently be made into areas not properly penetrable by cars, (b) the provision of roads connecting with these parking spaces and so located, constructed and maintained that they will, as far as practicable with a minimum of loss to the basic natural values of the Reserve, enable people driving on them to enjoy what reasonably can be so enjoyed and to receive some direct suggestion of the sort of enjoyment to be obtained only by leaving their cars.

(a) The locations selected for unloading places, with parking, are as follows: (See Plate I. of Master Plan)

(1) At the main entrance to Cypress Point and to other westerly portions of the North Headland Preserve, serving also for the trails of Sea Lion Point and vicinity.

(Near 4000E by 9500N)

(2) At the Bluefish Cove entrance to the North Headland Preserve (near 6000E by 9800N) giving a view from cars of the northeast shores of the Preserve without encroaching on it.

(3) In the old quarry (near 6600E by 10000N) serving the easternmost entrance to the North Headland Preserve and the landing place on Carmel Cove.

(4) In the old picnic ground at the southern end of the low south shore (near 6500E by 6250N.).

(5) (near 6800E by 6100N).

(5) At the proposed southern terminus of the south shore road (near 7000E by 5400N), commanding views to the south and giving access to China Beach, Gibson Beach and the point overlooking the Bird Rocks.

(6) At the main entrance to the Reserve (near 7600E by 8350N).

All of the above are of permanent importance for reasonable use of the Reserve by the public and are so located that cars parked at them, to the numbers indicated on the Plan, can be made relatively inconspicuous. All but No. 2 are merely modifications in detail of parking spaces which have <sup>long</sup> been used by the public. No. 2 is at a location only rarely used by cars in the past and is proposed in connection with the abandonment of the much more used old parking space above Bluefish Cove (near E5500 by N9600). The latter should be obliterated and access of cars to it cut off; 1st, because a road to it must either bisect an important meadow in a very conspicuous way or traverse several hundred feet of a transitional zone between forest and meadow in a manner seriously injurious to the natural development both of the flora and the fauna; and 2nd, because

the location, when reached by car, is unsatisfactory. The proposed terminal No.2 can be reached by a short spur from the Carmel Cove road in a swale near one edge of the meadow, will command fine views of the northeast shores of the Headlands that can nowhere else be made effectively visible from cars without inexcusable damage to the landscape, and will afford convenient access on foot to the various points of interest in the easterly part of the North Headland Preserve better than any other possible road terminal.

In addition to the above six unloading and parking places unconditionally included in the Master Plan certain others are conditionally approved, as follows:

(7) Until the acquirement of option 4 permits the transference of all regular picnic places to that area (See under subsection 5 below), it will be necessary either to permit parking of the cars of picnic parties at points along the south shore road between parking spaces Nos. 1 and 4 as above listed, or else to discontinue the practice of picnics along that shore. Groups of parked cars scattered along this great open stretch of shore are very unpleasantly conspicuous artificial objects in the landscape for those driving along the road as well as for other users of the Reserve, and it is wholly impracticable to obscure them. The only solution as long as picnics are allowed on this stretch of shore is to

confine the parking of cars to certain places, marked "F" on the Master Plan, and to treat these as mere "worn-out spots" along the edge of the meadow, with just as little artificial "improvement" as will suffice to confine parking to the selected areas and prevent serious erosion.

(8) If and when option 4 is acquired a parking space for use of picnic parties and others should be provided at "G" (near E7900 by N10000) just off the road leading to that addition, serving as a convenient point of departure for rambling on foot near the easterly shores of Carmel Cove. Also a series of small parking spaces should then be provided along the road in option 4. (The latter are not specifically indicated on the plan for the present Reserve but will appear on a supplementary plan for option 4.)

(9) Until option 4. is acquired, a small parking area should be provided on the south side of Carmel Cove (near E6800 by N9400), from which people would walk to the east side of Carmel Cove.

(b) The permanent road system for the Reserve as shown on the plan conforms to the existing main roads except for some important obliterations of needless old roads and a few short improvements in location discussed below.

The scars of former roads, when once strongly etched upon a landscape of any of the types prevailing on this Reserve (except under very special conditions), are extraordinarily persistent as reminders of human disrespect for the natural conditions, as if those conditions were held in slight esteem — things to be scratched and marred in pursuit of passing human whims and purposes of no lasting importance. For this reason no road scars should ever be made on new locations where old road locations can be made to serve, unless and until it is clearly established that in the long run the value of the Reserve will be more seriously depreciated by attempting to adhere to the old locations.

In selecting permanent locations for roads, the type of road which will be permanently satisfactory must be anticipated. There is no reason to believe that the volume of automobile traffic legitimately using the Reserve will ever justify roads wider than just sufficient for two cars to pass in reasonable safety and comfort at the very moderate speeds suitable for leisurely enjoyment of such a place as this, without such frequent encroachment on the bordering vegetation as to make it shabby and suggest further disrespect for it. There are two serious practical



defects of the otherwise agreeably rural and unpretentious character of the present main roads in the Reserve which will certainly require, sooner or later, the substitution of more permanent and harder surfacing in spite of its more emphatically artificial appearance. One is that maintenance by scrapers involved constantly repeated disturbance of soil and vegetation in a varying zone all along the borders of the roads at the discretion of highway-maintenance employees in a "free-and-easy, rough-and-ready" manner and invites a similar nonchalance about the limits of the travelled way on the part of the public. The other is that the dust-nuisance to visitors arising from dirt and gravel roads is serious for a considerable part of the year, both directly and through its effect on the appearance of adjoining vegetation. Bituminous roads capable of maintenance in permanently good condition with a minimum frequency of disturbance of the surface and margins offers the best practicable solution; and is justifiable not, as in ordinary highway construction, only by the existence of a volume of traffic which makes that the most economic method of maintaining a road in tolerable mechanical condition, but as the most effective means of minimizing conditions which impair something vastly more valuable than the roads. A prevailing surfaced width of 18 feet is indicated, with grades adhering as closely as practicable to

the natural surface of the adjoining ground and with the least practicable alteration of the natural soil-moisture conditions thereof as affecting vegetation. Insofar as ground outside the limits of the travelled way must be disturbed in road construction, the utmost care should be taken in the manipulation of the grading to leave such conditions that the readjustments of the native vegetation can produce a stabilized condition within a reasonably short time and that this condition shall not show any avoidably conspicuous evidence of differentiation from the relatively undisturbed natural conditions adjoining. The problem is one of relatively small details, of much importance in the aggregate, and the treatment of those details required is often quite different from what would be appropriate in the prevailing "humanized" landscape of an ordinary public park or private estate.

The main points of the road plan needing explanation as to location are as follows:

(1 ) The main road from the gate lodge toward the shore is satisfactory in location except at two places. One is the awkward and somewhat dangerous bend just inside the gate, which justifies a slight shift to the south when permanent surfacing is undertaken. The other is south of Whalers' Knoll, where the old road turns very abruptly and

then heads directly toward the Cypress Point parking space. The mere abruptness of the present turn, visually accounted for by the surrounding large pines, would not justify a relocation. It might reasonably be considered as a desirable discouragement to fast driving, since it does not involve serious danger or look wholly unreasonable. The prime reason for proposing a change of location here is to avoid entering upon the open meadow headed directly toward the Cypress Point parking space along the line of an old road to that point which ought to be obliterated, as indicated in the next paragraph. To make the proposed relocation, from E5100 to E4600, at the time when permanent surfacing is applied to the roads, and to obliterate the present dirt and gravel road between those points, seems, on the whole, wiser than to perpetuate the present alignment.

(2) The entrance to Cypress Point now has two roads of approach and departure crossing the meadow southeast of it. One of these, now generally used in approaching from the gate lodge, is esthetically unfortunate. To those approaching by it there is presented a rather ineffective view of the tops of the Cypresses seen as though "hull-down" behind nearer bushy ridges, with a cluster of parked cars directly in one's face and eyes presenting a distinctly unpleasant terminus for the approach by road and a conspicuously artificial barrier through

which one must pick a way to the footpath leading to the Point. The more southerly road, used for approaching Cypress Point by those who first take a turn along the south shore, and by a very few who approach from the gate lodge by way of a branch of this south road, running along the southern edge of the meadow, gives a much more satisfactory impression commanding very beautiful and impressive raking views of the southeast side of Cypress Point and of Point Cove, and heading towards the footpath entrance with the parking space off to the right. It would offer a still better impression if shifted from the easterly toward the westerly edge of the bare wheel-worn space along the brink of the declivity to Point Cove as shown on the plan. The road first mentioned is also an unpleasant artificial feature in the landscape as an interruption of a beautiful, sweeping transition from the steep slopes of Whalers' Knoll to the meadow; and the fact that it loops past the parking space into the other road so as to form a continuous circuit, and is itself the line of least resistance for drivers to take on coming in from the gate, leads a very considerable number of visitors, previously unfamiliar with the Reserve, to drive on past the entrance to Cypress Point and past Point Cove (which cannot be well seen from a car when going in the usual direction, toward the south) without

reasonable opportunity of becoming aware of the character of what they are passing by, and to leave the Reserve with the impression that the panorama of the south shore is its chief feature of interest. It is proposed, therefore, to discontinue and obliterate the less desirable approach to Cypress Point, and to perpetuate (with very minor changes) the old connecting road along the south edge of the meadow as the direct approach from the gate lodge, thus placing the foot entrance to Cypress Point at the end of a spur road with a small terminal loop. Incidentally this plan involves several hundred feet less of permanent roadways than if the road at the northeast side of the meadow were retained and that on the south side abandoned.

(13) The old road along the south shore, as far as the steep slope rising toward Vierra's Knoll, is intended to be retained without substantial change, except resurfacing and the removal of the surface water from it without lowering the general water table of the meadow and except for protection from threatened undermining by the sea at the fault near ~~E5250~~ by ~~S~~N7600 (as discussed in part I, Sec. 7,

page \_\_\_\_\_) [To be filled in by Mr. Drury when report is retyped.]

Continuing southerly along the west side of Vierra's Knoll a change of location is proposed before permanent surfacing is undertaken, in order to command the views out over the Bird Rocks much more effectively and at the same time improve

the road gradients. A radical change is proposed in the manner of terminating the south shore road. It now loops around Vierra's Knoll as a one-way road, rejoining the main line by a sharp turn and very steep gradient near ~~E6650~~ by N6100. The main objections to this are: (a) that the road along the southeasterly slopes of Vierra's Knoll arbitrarily and unnaturally bisects a beautiful and characteristic unit of topography and vegetation and animal life, consisting of the meadow, the Knoll and the gradual transition of one into the other; (b) that the road in passing around the Knoll is forced unfortunately close to the State Highway and impairs, by the introduction of motor traffic, a small unit northeast and north of the Knoll of much interest for people who wander in it on foot but offering little of value to those passing through it by automobile because of its limited extent and smallness of scale; and (c) that it fails to give adequate emphasis to the real climax and logical terminus of the south shore road at the superb outlook above the northerly end of Gibson Beach, where the foot paths take off to the shore directly overlooking the Bird Rocks and to Gibson and China Beaches. It is therefore proposed to obliterate the loop around the east side of Vierra's Knoll and provide a small terminal loop at the climax outlook point. In adopting this plan two objections have to be recognized. One is that it

involves some artificial masonry for supporting the edge of the outlook and turn-around; but a careful examination of the erosion from surface water wash which is taking place above the level of an outcropping ledge some 35 feet below the plateau surface will before many years destroy, unless checked by some such artificial means, not only the small flat from which this striking outlook is commanded but also the lateral support for the present road around Vierra's Knoll. The second objection is that so small a terminal loop and the small parking space possible in immediate connection with it, to the northwest, may perhaps become congested at certain times. If this proves to be the case to a really serious extent the least objectionable solution would appear to be an overflow loop of larger dimensions on the plateau to the southeast, reached by filling the upper end of the eroded gulley just south of the outlook point.

(14) The line of the old road to the Quarry parking space, for access to the landing on Carmel Cove and to the easternmost trails of the Headland Preserve, is marked for retention where already well defined; but where it now consists of several alternative wheel tracks (south of the discontinued Bassett Avenue road) the permanent line is shown where it will be least conspicuous and on the easiest gradients, and the other wheel tracks, some of which are starting to gully, should be carefully obliterated.

(15) The proposed new branch road to the proposed new Bluefish Cove road terminal is desirable, as indicated under (2) page 32, for two reasons. One is to permit the complete elimination of any road across the open meadow further west or along the edge between that meadow and the Headland Preserve without leaving the easterly part of the Preserve inaccessible except to those who can and will take a rather long and arduous walk. The second is to make it possible for visitors in cars to obtain one very impressive and distinctive outlook upon the northern shores without letting cars enter it.

(16) If and when option 4 is added to the Reserve it will become necessary to provide a road connecting it



with the permanent road system above outlined, and this can be done with the least damage to the landscape on approximately the line indicated, all of which as far as the present boundary will be new construction. The alternative, to perpetuate existing farm roads, with new connecting links, would be much more damaging; because these roads cut across the meadow in such a way as to make them, especially if widened and surfaced, very conspicuous artificial elements in the landscape, and because the retention and widening of the existing narrow and dangerous road next the shore of Carmel Cove just south of the old Village would require either blasting a bad scar on the shoreward face of the conglomerate knoll, or a sea wall, or both. These old farm roads should therefore be obliterated except where they can advantageously be used for trails. Until option 4 is acquired the loss to visitors through inability to drive their cars into the area northeast of the road to the landing will not be sufficient to justify a road in this area even on the relatively unobjectionable line indicated. So far as it is necessary, in the meantime, to get service trucks into the area, it can be done along the proposed shore trail from near the "Whalers Cottage", using a locked barrier at the entrance to the trail to prevent general use by cars.

(17) The absence from the plan of any roads open for public use by automobile in the wooded area between the south shore road and the State Highway may require a word of explanation. The satisfaction obtainable from merely driving through these woods by automobile is, broadly speaking, of about the same sort that is to be had on a good many miles of road through Monterey Pine forest outside of the Reserve, in several cases more effectively than in these particular woods. One of the chief contributions of these woods to the value of the Reserve is to provide a natural sylvan background for its much more distinctive and notable shoreward portions, and to isolate those portions from the highway and from the bordering private lands subject to artificial development. They are in general so narrow that the circulation of automobiles in them would impair their effectiveness as a natural background and screen quite out of proportion to any benefit to be obtained by driving through them on a road or roads interpolated between their southwesterly margin and the highway and never far distant from the latter. On the other hand, if these woods are kept free from automobiles and automobile roads, and other noticeable artificial features, and are protected from recurring human interference to the extent that is possible and proper on this Reserve, they are large enough and sufficiently varied in topography and soil, to provide

a much greater wealth of natural details, of kinds which can be well-appreciated only by people exploring woodlands in a leisurely way on foot, than can be expected to remain in the Monterey Pinelands outside of the Reserve.

2. Trails. The locations selected for permanent trails as shown on the plans are in most cases those of existing foot-worn trails. The area has been so long used, and, especially on Cypress Point and near the shores, by so many people, mainly seeking those very values which it is the purpose of the Reserve to make available in perpetuity, that an immense amount of individual experimenting has been done as to the most satisfying view points and the most satisfying lines on which to walk in seeking the enjoyments which the natural conditions offer. And this experimenting has left a great deal of illuminating and suggestive evidence etched upon the ground — at the cost of a deplorable amount of random wear and tear.

In those parts of the Reserve which have been and will be so much frequented as to require distinct and obvious trails, and the general confinement of the wear<sup>and tear</sup> of walking to those trails; the most searching and deliberate exploration, regardless of where people have been before and regardless of present obstacles to

access, has revealed few places to which the public should for any reason be given access and which are not already traversed by one or more of these existing "volunteer" trails. The trail plan, therefore, has resolved itself into a process of (1) selecting those of the existing trails, ~~which~~ if followed by one who spends sufficient time in the Reserve, or often revisits it, will best ~~make~~ be available for enjoyment/the immensely varied qualities of the area (provided the rest of it can be protected from any considerable future wear and tear and be permitted to recover), (2) making a few changes in the lines of these selected trails where they cannot be perpetuated without serious danger to those who use them or serious damage to the natural conditions, (3) adding a few new connecting links, and (4) proposing to eliminate other trails and nascent trails as needless and on the whole injurious. (See discussion of "barriers" in the Appendix, page 2.

To adapt the selected trails to indefinitely continued use, without cumulative injury to surrounding natural conditions, requires precautions against erosion and not infrequently protection of roots from exposure and direct wear and tear or from the effect of the compacting of the soil and altering the drainage. This calls sometimes for

adding a little soil carefully selected in relation to the place and purpose of its use, often a light surfacing of rotten granite, rarely a plank bridging, and at steep places the use of steps or riffles of the local granite, as simple and as inconspicuous and as little labored in appearance as is consistent with the effective performance of their humble utilitarian functions.

See separate sheets of numbered notes referring to numbered locations on the plans; Appendix, page

3. A dependable water supply is required for fire-protection and for the use of visitors and employees. Regardless of the source from which water can best be permanently obtained, a matter still under investigation, the following consideration should govern the construction, repair and renewal of the distributing system.

The most effective and least objectionable location for a storage tank of moderate dimensions is on Rat Hill. The permanent distribution mains should be placed as far as practicable within the permanent roadway locations, notwithstanding the obvious objections to trenching and repairing roads whenever it is necessary to lay or repair the pipes, not only, and not primarily, because hydrants for fire service should in general adjoin the roads but

chiefly because trenching elsewhere than in the roads is apt to be seriously injurious to the natural conditions which it is the chief object of the Reserve to protect and cherish. Water mains and other utilities are customarily laid beneath street pavements in cities simply because the damage to abutting properties of laying and maintaining them elsewhere (as for example across the adjoining private front yards) would far outweigh the recognized objections to keeping them in the streets. It cannot be too strongly emphasized that any avoidable artificial disturbance, by trenching or otherwise, of the natural conditions on this Reserve outside the limits of necessary roads and other permanent structures is much more seriously objectionable and unjustifiable than corresponding invasions on private property in cities and towns. Hydrants for fire service, and taps and bubble-fountains for drinking water supply needed near the principal parking spaces, should be as low, as small, and otherwise as inconspicuous as possible.

4. Sanitary facilities for the public will be needed permanently at or near the locations now provided with privies adjoining the Cypress Point parking space at (1) and the south shore parking space at (4). Those at E6450-N7000 and at E4900-N8100, serving primarily the picnic places along the south shore should be continued only as long as those picnic places are retained in use, and ultimately transferred to the picnic area in option 4 and near E7900-N10000. Another should sooner or later be provided near the Bluefish Cove overlook and parking space and probably one at the quarry landing place, and it may be found expedient to provide one at the northeast corner of the Gate Lodge service yard accessible to the public without entering the Warden's quarters. When the extension of the water distribution system permits, it would be desirable to substitute water closets for the present arrangements ("primitive" in a sense quite different from that applying to primitive natural conditions); but before this is undertaken a careful investigation should be made, in each case, to determine whether and how the effluent can be disposed of without causing a serious local change in native vegetation by alteration of ground moisture conditions, or other objectionable artificial results, and to determine the precise design and location of the structures which will make them least conspicuous and most serviceable.

5. Problems of picnics, bathing, boating and related activities.

(a) Picnics in the Point Lobos Reserve have two aspects. An empty stomach can interfere with enjoyments of the highest kind and for many visitors who want to stay for several hours in the Reserve a pocket-lunch or a picnic may be important as a means of conditioning themselves to enjoy that which is obtainable nowhere else just as occasional access to drinking water in the Reserve may be important to the same end. On the other hand, a picnic in the Reserve may be important to the participants for its own sake; as a social and gastronomic event which is its own justification, to the pleasures of which agreeable outdoor surroundings <sup>may</sup> contribute some incidental glamour, but which quite definitely tends to make the participants, because of their absorption in these innocent and agreeable social and gastronomic activities, less interested in and appreciative of the values peculiar to the Reserve throughout the whole of their visit, than the same individuals are on other visits that are free from such social distractions. For the enjoyment of the peculiar values of the Reserve is in general a highly individual matter, and the pleasures of social intercourse, however excellent in themselves, are in general a distraction therefrom.



This is not to say that even those who have the keenest appreciation of the peculiar values of the Reserve, who love long and solitary meditations in it, may not also greatly enjoy social picnics in it at other times. Many of them do; just as they may enjoy going to a ball game or an opera at still other times and places. And, of course, there are all sorts of intermediate kinds of picnics between the pocket lunch of the solitary rambler absorbed in the spectacle before him and the skylarking mob of big "organization picnic" completely absorbed in the social event.

Even in the latter case something of the peculiar values which justify the maintenance of the Reserve is likely to be experienced by a few stragglers, who might never have gone there but for the inducement of the picnic. But this incidental utilization of its basic values is likely to be obtained at so heavy a price, through interference with the more appropriate enjoyment of the Reserve by other visitors and by physical damage to its natural conditions that the large "organization picnic" ought to be definitely ruled out; certainly so within the present limits of the Reserve. Within those limits, fire-place picnics even for smaller groups involve so much risk of the escape of

fire into the highly inflammable materials naturally characteristic of the Reserve and so much temptation to "cleaning-up" and artificializing those conditions, and they so often tend to emphasize the use of the Reserve for social and gastronomic values at the expense of uses more appropriate, that they should be confined to the localities indicated on the plan as discussed under fire-protection. Considering also that the accumulations of parked cars which they invite along the south shore road make them objectionable to other visitors, it is a debatable question whether the game is worth the candle and whether it would not be wiser to discontinue fire-place picnics entirely to the south and west of Carmel Cove.

East and northeast of Carmel Cove, extending beyond the present boundaries of the Reserve to San Jose Creek and the State Highway, including option 4, is an area detached from the main body of the Reserve in which are comprised those characteristics which led to its establishment, an area much more completely man-handled and denaturalized than any considerable part of that main body. In relation to the primary purposes of the Reserve the inclusion of option 4 is desirable mainly as a protective measure, lest private development, with buildings and the like, intrude too closely upon the major landscapes, artificially deprived

of any screening woodlands on that side. Within that area, if acquired as a buffer zone, are excellent opportunities for picnics on and near the shores and better opportunities than within the main body of the Reserve for bathing and other recreations ordinarily associated with public beaches, under conditions which would permit the development of convenient facilities for their use without intruding on or otherwise impairing the priceless natural conditions of the main body of the Reserve.

This area, too, has the considerable historic interest of including the probable site of Portola's Camp, located as he says conveniently both to woodland and pasture and to fresh water.

It is recommended, therefore, as a plan for the future that this area be included as an annex to the Reserve proper; that its former element of woodland intermingled with its meadows be artificially restored, especially along the boundary between it and the main body of the Reserve, marked by the southwesterly declivity of the now bare and open ridge that extends to the Highway from the site of the fishing-village east of Carmel Cove; that it be developed to the northeastward of that ultimately wooded boundary, and except along the

shores facing toward the North Headland Preserve, frankly as a conveniently humanized and only quasi-naturalistic area for just such recreational uses as picnics and bathing, with thoroughly convenient facilities for the same; that it be made accessible by automobile from the permanent road system of the main body of the Reserve, entrance to which is controlled at the Lodge, by the branch road indicated on the plan and described above under subsection 1 (b) (15); and further that it be made independently accessible to those who wish to use it without taking their cars into the Reserve proper and paying the toll for such use by providing a parking space near the south end of San Jose Beach, opening directly from the highway and giving convenient access on foot to the recreational facilities of this Annex but not permitting entrance of automobiles from it to the road system of the Reserve, thus avoiding necessity for continuous attendance of a second gate-tender.

If and when this recreational annex and buffer zone of woodland is provided for, if not before, fire-place picnics should be entirely eliminated from the Reserve proper, and the parking of cars for shore picnics even without fire along the open south shore road of the Reserve between the parking spaces numbered (1) and (4) should be discontinued.

(b) The subject of bathing has been covered above, except to say that wading, and bathing by occasional individuals and small groups who come dressed for it, may reasonably be permitted on Gibson and China Beaches and elsewhere along the south shore.

(c) Boating by the public from the shores of the Reserve is not a thing to be encouraged or developed. It is true that from the water close to the shores of the Reserve especially near Cypress Point and the northerly shores of the Headland Preserve certain very impressive and distinctive views are obtainable; but except in the calmest weather, when those views are least impressive, it is <sup>a</sup>very hazardous venture to seek them out, even for experienced and capable water men. It is likely to result in many deaths unless rigidly discouraged. Moreover, any considerable development of boating in the waters near the Reserve would seriously endanger <sup>two</sup>natural features of the Reserve of great interest to visitors as seen from the shores: the sea lions and the birds which nest on the Bird Rocks. It is very important to protect from any human disturbance the off-shore refuges on which these colonies depend for their perpetuation. It is probable

that even in the absence of boating from the shores of the Reserve the Warden will need a swift motor-boat ready for instant service in order to protect them properly against violaters coming from elsewhere. Obviously the problem would be far more difficult if boating were encouraged locally.

Carmel Cove is notable as one of the very few harbors of refuge available for small craft south of the Gold Gate, and should always be kept available as such. It might conceivably develop into a yachting headquarters of considerable importance in spite of its remoteness from centers of population; but it would seem, upon the whole, distinctly inadvisable to give any artificial encouragement to such a development, as by installing or permitting the installation, within the Reserve, of such facilities as tend to develop in connection with any yachting center. Apart from the general objections above cited to anything which would encourage people to frequent the waters around the Reserve in boats, it must be borne in mind that indefinitely expanding artificial developments on the adjoining land (for

storage, repairs, and all sorts of miscellaneous harbor-side conveniences) are what chiefly mark the difference between a satisfactory home-port for boats of any kind and a satisfactory harbor of refuge. If the surroundings of Carmel Cove are kept for all time as completely natural as is consistent with maintaining at the <sup>old</sup>quarry site a simple landing-place accessible by road, the use of it by yachtsmen of the Pacific Coast as a harbor of refuge and as an objective in cruising will be a far more delightful experience than if its shores were to become cluttered up with the usual accompaniments of a convenient home-port for a local fleet. And from the standpoint of visitors to the Reserve by land it would be very risky to permit any beginning on the shores of the Cove of artificial developments of a kind tending to indefinite expansion. This locality, unlike the land beyond the ridge on the easterly side of the cove above discussed, cannot be effectively segregated from the main body of the Reserve and the great natural features thereof.

6. Other Service Facilities Including Buildings.

The general location selected by the Division of Parks for the one automobile entrance to the Reserve, for the gate lodge commanding it, and serving also as the Warden's office and residence, and for the attached service yard and sheds, seems on mature restudy to be the best that could have been selected. The amount of space provided, however, both under roof and within the yard but unroofed, was rather limited. A small extension of the building, entirely justified, has already been made; and several small service functions have overflowed outside of the enclosure. One such little encroachment is outside the southwesterly corner of the service structures. Another is an unenclosed storage place for fire-wood, etc., at the westerly base of Rat Hill. It is practically certain that need will arise from time to time for the performance of other service functions which cannot conveniently be provided for within the limits originally assigned.

To permit service functions thus to exude at random beyond the limits deliberately assigned to them into the Reserve at large, in response to momentary pressure due to the inadequacy or inconvenience of the



service facilities within the defined limits, is extremely dangerous. Every such encroachment, however small the area involved, however slight the artificial disturbance of natural condition may seem to be, however temporary it is intended to be, and however urgent the need for performing the service function in question, is a pernicious step toward breaking down a fundamental principle, upon the strict observance of which the permanent maintenance of the peculiar value of the Reserve depends -- the principle of sharp differentiation between those areas within the legal boundaries of the State Park land which are deliberately and for compelling reasons set apart for the performance of necessary utilitarian functions, within which areas the administrators must have a relatively free hand in arranging and rearranging artificial facilities for the efficient performance of those functions, and the land devoted to the primary purposes of the Reserve, within which no slightest disturbance of natural conditions should ever be permitted for the mere convenience of the administrators. Otherwise there is no limit to the nibbling process of encroachment ~~thereon~~, and gradual deterioration of, the natural conditions for protection of which the Reserve exists.

To facilitate rigid adherence to that principle, to avoid constantly recurring temptation toward disrespect by administrators for the inviolability of the natural conditions in the Reserve proper, it is essential: first, that the areas deliberately assigned for the performance of service functions be adequate for the reasonably convenient performance thereof; second, that the boundaries thereof be permanently, and from within unmistakably, marked; third, that if the limits of service <sup>areas</sup> thus deliberately defined prove to be inadequate because of errors of judgment in the original planning, new limits should be determined and enclosed with equal deliberation; and fourth, as a corollary to the above, that no discretionary "spilling over" beyond the defined limits be tolerated.

(a) The limits of headquarters service group, as now defined by walls, fences and buildings, cannot be appreciably extended to the west or southwest without encroaching seriously on important open landscapes of the Reserve. They might be extended, somewhat to the east and southeast, toward the Highway without serious harm provided a fringe of native vegetation is maintained between them and the highway, sufficient in width and density and in naturalness of appearance

to avoid unpleasant obtrusion of this service group as a whole upon the public passing and entering the Reserve. (See remarks as to justifiable artificial control of such vegetation in the next sub-section.)

With or without such enlargement easterly, this headquarters service-enclosure is closely limited in size and it is important to arrange and use its limited space as efficiently as possible for two groups of functions: (1) some with which the public is not directly concerned but which for convenience or for the sake of close supervision and control, it is most important to attach to the Warden's office and residence; (2) some for the direct service of the public which cannot be far detached from the gate-lodge and Warden's office without unwarranted increase of personnel or inconvenience to visitors.

(b) Some legitimate service-functions are likely to demand so much space for their convenient performance that they cannot be permanently provided for within the limits of this group, at least without crowding out or unduly cramping other functions which it is more important to provide for here (for example, yard-space for storage of fire-wood and of other bulky material and equipment

only occasionally used and least in need of close supervision by the Warden), and for these a supplementary service area must be provided in some detached locality screened from the general landscape of the Reserve. Under existing conditions the place in the woods west of Rat Hill <sup>("I", Plate I)</sup> ~~(/ Plate I)~~ now used as an overflow storage-dump and working space is probably as little conspicuous as any that could have been picked; but as an artificial interruption in the midst of the principal pine woodland of the Reserve it would injure the public value of that woodland far out of proportion to the area absorbed if it were to be perpetuated and extended, and if new artificial elements were to be added to it such as <sup>the</sup> fencing which such a yard certainly needs and the sheds and other structures for which need is almost certain to develop in the course of time. In the long run it will be far better to select some other detached service area not within any of the natural landscape units of the main body of the Reserve.

If option 4 is acquired such an area of ample size can be set apart in what is now an artichoke field between the Highway and the proposed park road to option 4; accessible through locked gates from either and conveniently adjacent to the picnic grounds and other recreational facilities of the proposed "Annex". In this location working yards

and any structures of moderate height would, ultimately, <sup>completely</sup> be/hidden from the rest of the Reserve by the future pine woods which ought, in any case, to form the permanent visual boundary of the Reserve proper at the northeast along its natural topographic boundary, not far from its present legal boundary. Bare as this site and its surroundings now are, and conspicuous as any service constructions would be if now installed here, it is only a question of time when screening pine woods will reestablish themselves, whether the process is hastened or not.

(c) There is another opportunity, important in case option 4 should <sup>not</sup> be acquired, for a smaller service area, similarly screened and surrounded by the same future pine wood border of the Reserve proper, on the westerly extension of the same flat into the present holdings of the State.

One of the functions which it is desirable to undertake in the latter area, as soon as reasonable assurance can be obtained that it can be persistently and skillfully followed up, is that of a small experimental station for propagating and growing under a variety of test conditions some of the more important species of <sup>plants</sup> ~~native~~ to the Reserve, especially the Cypresses; concurrently with and supplementary to the continued close observation of the behavior and life history of the same species in the

Reserve proper in the absence of deliberate control. It is to be hoped that, with no more help than such protection as can be given against injurious artificial interference, the Cypress growth, upon which so much of the special value of the Reserve depends, will continue to reproduce itself and to retain the characteristics which have made it famous. If, however, in the course of time it should become clearly apparent that this hope is fallacious, that natural reproduction is progressively failing to keep pace with deaths, or even that changes in the prevailing types of growth-habit (whether due to selective factors operating differently on the several genetic strains which appear to be represented here, or otherwise) are causing progressive loss of those characteristics which have made these particular stands of Cypress so notable, it may become of vital importance to apply some artificial aid; and as a basis for doing so wisely to have a background of detailed knowledge of the results of various procedures in artificial propagation and in the growth habits of propagules under varying conditions such as can be obtained only as a result of experiment continued over many years. What makes certain Cypresses and certain groups of Cypresses of Point Lobos so extraordinarily interesting,

beautiful and distinctive, so very different from thousands of others planted elsewhere though propagated directly or indirectly from the stock of this locality, is a combination of genetic and environmental factors about the precise inter-relationships of which we are as yet very ignorant. Hence the need for supplementing observation of what happens in the Reserve by experimentation on the adjoining annex: two functions which must, for the safety of the Reserve proper, be kept utterly distinct.

(d) One of the functions, co-extensive with the Reserve, is the education of visitors in observation<sup>of</sup> and appreciation for all that it illustrates; and important as it always will be in this connection to place first emphasis upon direct, first-hand observation by visitors of things as they actually occur in their natural setting, it may become desirable and feasible to provide those visitors who care to avail themselves of it with such aid and stimulus to more intelligent and alert observation as can be given by ready access to certain kinds of predigested information, the second-hand results of scientific study by others, of the sort suggested by such terms as "bureau of information", "reference library", or even "museum" -- though the latter is regrettably suggestive of something substituted for direct observation of the real thing in its natural setting. To be able, while at the

Reserve, easily to ascertain the names and relationships and other pertinent known facts about animals and plants and societies thereof directly observable under natural conditions, or about significant geological or other facts similarly observable is all to the good, if the means for doing so are good enough. Such artificial means, especially insofar as they have to be under roof, are clearly not a part of the Reserve as an example of the real thing; but are merely a convenient annex to it. If very limited in extent they might most conveniently be associated with the gate-lodge, and if attempted experimentally on a small scale might best be located in that service area in a frankly temporary and very unpretentious and inexpensive structure. But if there should be any prospect of considerable expansion of facilities of that sort and/or provision for one or more specialized attendants the whole function should be transferred bodily to the "Annex" to the Reserve, where adequate space would be available without encroaching on, and insofar destroying, the very thing which alone justifies developing such a service here.



Careful consideration has been given, at first rather favorably, to the idea of using the floor of the old quarry on Carmel Cove as a site for the prospective "museum" and nature study headquarters. This site would be conveniently adjacent to the main centers for nature study in the Reserve proper, and has several other practical advantages for such use. Moreover, there would be more excuse for artificial structures of considerable size at this place than anywhere else in the main body of the Reserve because it is deeply and indelibly marked as having been grossly artificialized in the past, and there must be maintained here, in any case, an artificial landing and launching place with at least some small building for the boat equipment required for protective purposes.

It would be a fundamental mistake, however, to start the development on Carmel Cove of any such service institution, because, like the use of the Cove as a home-port for pleasure craft or fishing boats, just in proportion as it proved eminently successful and valuable in performing its special functions there would be legitimate pressure for expansion of its artificial structures and accessories.

It is far too risky to admit any such camel's head into this particular tent; for Carmel Cove and the lands sloping toward it constitute a topographic unit that is intimately associated with the most impressive natural features of the Reserve and serves as a sort of antechamber to them, in passing through which visitors should be able to shake off as completely as possible all impressions associated with the Highway and with conspicuously artificial developments of every kind. All service-functions involving indefinitely expansible artificial features ought to be rigidly confined to the outlying service areas definitely segregated from the Reserve proper, viz., the gate-lodge area and the northeast "Annex" beyond the topographic limits of the Carmel Cove unit. In spite of its having been more completely and more recently agriculturalized than any other part of the Reserve, in spite of having been stripped of its natural enclosing woodland on the eastern and northeastern upland borders, in spite of the old quarry scar and even the canning factory and the fishermen's houses, the Carmel Cove unit has in the past performed its function as the introductory landscape unit of the Reserve with much effectiveness.

That

That effect has been quietly heightened by removal of the structures on the east side of the Cove and will be still further heightened by removal of the canning factory and surrounding junk.

The only other building in the Cove unit, indeed the only other building in the Reserve proper beyond the limits of the gate-lodge service-group other than the small and unavoidable sanitary facilities, is the Whalers Cottage. This is picturesque and of some mild historic interest. Largely because of these qualities, it was not torn down like the other fishermen's dwellings and out-houses near the Cove, but adapted in a makeshift way for residence of an employee engaged in service for the Reserve, with the thought that it might be permanently retained for similar uses. The attempt to plan how it could best be made reasonably satisfactory for such use (by adding a wing on the rear, providing a garage, enclosing a suitable back-yard and the like) brings out very clearly that such use, even for one family, is a highly expansible function. And if housing for one employee in the midst of the Reserve proper is permitted, why not for others?

There is in fact no permanent service-function to be performed by the Whaler's Cottage which would at all justify a building in this locality; and its value, from the standpoint of historic interest and of picturesqueness of its own sort, is, <sup>of</sup> a kind distinctly not contributory to the prime values of the Reserve, nor is it great enough in itself to justify making this building a "Historic Monument" constituting an island within a Reserve devoted to totally different kinds of values. There appears to be no defensible alternative to recommending, somewhat regretfully, that instead of its being further patched up or rebuilt for indefinitely continued use and probable expansion, it should follow the rest of the ramshackle fishing village into oblivion and leave a perfectly clear-cut differentiation between the well-defined and properly screened service areas on the eastern borders of the Reserve available for any necessary service structures and the Reserve proper in which no artificial structures that can possibly be avoided should ever again be allowed to intrude.

7. Certain Manipulations of Vegetation, necessary or permissible as means to proper Utilization of the Reserve; the Dangers thereof; and the Limitations which should control them.

The general importance of avoiding artificial manipulation of the vegetation of the Reserve, either by planting, or by cutting, pruning, "cleaning-up" or other removal of vegetation, dead or alive, has been discussed elsewhere; with an attempt to indicate those conditions and safeguards under which alone should authorization be given for any exceptions to a rigid and complete adherence to this "hands-off" policy where the reasons which might be adduced for such exceptions are for protection of the values of the Reserve against damage. (See Part I, Sec. 7, pp 47 through 55.)

Reasons (and also untenable excuses) for artificial manipulation of the vegetation may be adduced, also, for the sake of more effective utilization of the Reserve by visitors or as incidental to the installation or maintenance of artificial facilities required for such utilization. The following attempt to indicate the limits of justifiable exceptions, on such grounds, to the general rule of non-interference.

*Adjust numbers where Part I is typed*

(a) Removal and shifting of vegetation dead or alive.

Deadwood and live growth seriously obstructive to trails obviously must be removed artificially. In general deadwood so removed, and some of the live growth so removed and thus converted into deadwood, can be advantageously used, and should be used, to increase the obstruction offered by naturally accumulated deadwood and live thickets to the needless rambling of visitors into areas where any considerable amount of such rambling would be seriously damaging; especially in localities where there has been recent unwise removal of such natural obstructions. To place deadwood thus deliberately as an obstruction to undesirable rambling, and not make it look unpleasantly artificial, is a delicate business, requiring nice discretion and considerable patience. The removal of fallen deadwood and the like from trails is a routine operation that has to be done promptly as needed; and it is normally better to separate the two operations by temporarily setting aside obstructive deadwood that clearly has to be removed and making a separate special business of placing deadwood where it is needed, whether taken from such temporary piles or from elsewhere. For what comes from necessary clearing of trails will not be enough, in the immediate future at least, to make good the deficiency of fallen deadwood in certain other places, due chiefly to

injudicious "cleaning-up" in the past. Even though this artificial replacing of deadwood be generally confined to places where such additional obstruction is very clearly needed to aid in controlling wear and tear, the probable insufficiency of suitable material necessarily removed from the trails will create a temptation to rob Peter for paying Paul and to produce an unnatural freedom from fallen deadwood in areas not so obviously needing protection from rambling off the trails. It may indeed be expedient at first to obtain some such material, carefully selected from neighboring woodlands off the Reserve.

Insofar as the growth of woody plants along trails must be held in check to avoid obstruction, it is in general better as to naturalness of appearance as well as for economy of labor, to remove, from time to time here and there, a whole bush or tree or large branch of a tree, so that what is left may have space to make normal growth for a relatively long period without further interference; rather than timidly to make repeated minor prunings, which tend to produce a hedge-like effect. There is, however, one definite exception to this. At a few places in the Headland Preserve, trails on the edges of steep declivities are made both safer and more enjoyable by low, dense, barriers of

largely wind-pruned vegetation, especially of cypress, along their outer edges. Here cautious and persistently repeated "nipping back" of the encroaching portions of the otherwise natural parapet, even if it makes that side of it look obviously manipulated, will be better than the alternatives of breaking into the wind-shorn outer and upper surfaces by taking out whole plants or branches or of progressively shifting the trail as it is encroached upon. (As to the possible expediency of extending these natural, hedge-like parapets along trails in certain places by the aid of artificial planting, see below under (b) page .)

It is not recommended that any cutting-out or pruning of vegetation be done on the Reserve for opening up views, or for maintaining now-existing views or in general terms for controlling the landscape values of the Reserve as presented to ~~the~~ visitors from special points of view; although it is frankly recognized that the expectable natural growth and changes of the vegetation will obscure or impair a good many views and glimpses now of great charm and interest. It is hoped that upon the whole the losses in value through this cause at some places will be counterbalanced by gains at other places, the general character remaining unimpaired



or actually enhancing in richness, beauty and dignity with the cessation of such human actions as have often in recent decades interfered with the natural maturing of individual plants and plant associations.

This, however, is no more than a reasonable hope at present; fully sufficient to justify a policy of watchful waiting for a period of some years to come. If, after some years, careful and detailed comparison of the actual trends of growth and change with the records of conditions existing at the time of the present study should show that this hope is in any important particulars mistaken -- that there is in fact in those particulars a real and progressively increasing loss of values -- a review of the knowledge gained by such comparison, made no less carefully and comprehensively than the present study, may justify undertaking the very difficult, delicate and dangerous task of deliberate artificial control of the vegetation as affecting those particular features and at the same time provide a factual basis for the technique of doing so successfully. At least until then, in the Reserve proper, that is to say outside of the service areas and the northeastern "Annex" as proposed, "landscape improvement cuttings" should be taboo.

(b) Planting, and related Positive Control of  
Vegetation for Effect on Landscape.

(1) Protective "Buffer Zones" bordering a Natural Preserve.

Whatever limits may be assigned to any area devoted to the preservation of natural conditions (or of any conditions, including those of historic or prehistoric remains of former human activity, the value of which lies in something for which no product of present or future human skill can be substituted without irreparable loss) it is folly to ignore the effect upon the value of the specialized area so defined which may result from existing or future conditions of surrounding areas. This is especially true where the purposes for which the "preserve" is set apart include inspirational and esthetic values derivable from its landscape. For the landscape includes all that one sees, regardless of land ownership. As Hamerton said, in effect, "Land belongs to its landlords, landscape belongs to him who for the time being beholds it."

Only in the rare cases where the boundaries of an area which is to be administered with strict regard for preservation of values not humanly reproducible coincide with topographic features which completely limit the visible landscape to the same area, or where the extra-territorial portions of the landscape are practically safe against serious adverse developments, as is an ocean horizon or the sky, can

this effect of surrounding conditions reasonably be ignored.

Normally any area, or any object or objects, set apart to be administered strictly for preservation of non-reproducible values embodied therein, needs partial or complete surrounding by protective "Buffer Zones" to be administered upon an entirely different principle. That principle is concerned not with preserving, as such, pre-existing conditions in the "Buffer Zone"; but with creating and/or maintaining in the Buffer Zone conditions that will best protect the contained objects from adverse external influences. The contents of any museum are thus protected by "Buffer Zones", including walls, roofs, cases, backgrounds, etc., in no way confused with, and managed and manipulated upon entirely different principles from, the precious contents. They are deliberately designed and managed to provide artificial protection from that which lies beyond them and which, without such intervening protection, would either injure the precious contents physically or reduce the impressiveness and value thereof by the distraction caused by inharmonious surroundings. The latter is the main purpose of Buffer Zones in connection with an area set apart for preservation in situ of natural (or other non-reproducible) conditions.

In the case of the Point Lobos Reserve, and of other areas in which the character of the natural landscape is one of the important things to be preserved and protected, the conditions most to be desired in "Buffer Zones" are (1) that they shall present, toward the strictly preserved area, a border which is in appearance as closely akin to and harmonious with the landscape of the Reserve proper as practicable, and (2) that they shall effectively obscure any less harmonious conditions beyond, whether on attached service areas under the same administration or on land subject to control. To meet these two conditions will often require artificial manipulation, by planting and otherwise, of a sort that might fairly be called "nature faking"; somewhat parallel in principle to that employed in the realistic manufactured backgrounds, simulating the appearance of a native habitat, which are sometimes provided for natural objects housed in a museum.

The more perfectly this sort of thing is done in a "Buffer Zone", where it properly belongs, the more danger there is that it will be used as a precedent for perniciously extending such artificial manipulations into the Reserve proper, where entirely different principles of management

apply. But the wisest safeguard against this danger is not blindly to ignore the need for "Buffer Zones" but to define them clearly and insist on their differentiation from the Reserve proper.

On this principle it is proposed that a "Buffer Zone" be established along the easterly and northeasterly borders of the Reserve; that the line between this and the Reserve proper, constituting the boundary of the latter, be as positively defined as a property line, although unmarked by any visible barrier; and that insofar as the artificial planting of native vegetation and kindred manipulations shall be found expedient for enclosing the natural landscape of the Reserve on the landward side and obscuring views of what lies beyond they shall at no point be allowed to extend across this boundary into the Reserve proper, being kept in general well within the limits of the established "Buffer Zone", irregular in their distribution, interrupted, occurring only where needful, and leaving a varying portion of the Buffer Zone adjoining the Reserve proper as free from artificial interference as the latter.

The boundary beyond which such "Buffer Zone" operations should at no point be allowed to extend is indicated on Plate \_\_\_\_\_. On the same plate are indicated certain

areas within this Buffer Zone in each of which a particular kind of artificial control of the vegetation appears to be justified, as set forth in the subjoined list (Appendix ).

Exemption of this definite "Buffer Zone" from the restrictions against planting and other such artificial manipulations of vegetation which apply to the Reserve proper is not to be interpreted as authorization for "ornamental planting" or any striving for "landscape effects" in this zone, such as might make it look appreciably different in character from the Reserve proper. Its purpose is simply to minimize the intrusion on the attention of visitors to the Reserve, as part of the landscapes seen therein, of objects likely to disturb the prevailing impression of the naturalness of those landscapes by permitting the interposition at certain places of artificially developed foliage screens less noticeable than what they are intended to screen. To accomplish that object not only must these screens be confined to kinds of vegetation native to the Reserve which they border, but must in other respects approximate locally natural conditions so closely that the artificial characteristics inevitably present in them will become, within a reasonably short time, hardly perceptible. Otherwise the screens are liable to obtrude on the attention worse than what they are intended to mask.

(2) Within the Reserve Proper.

Certain service-facilities, which cannot be confined to service areas in or beyond the main "Buffer Zone" but must occur as isolated artificial objects within the Reserve proper (for example; privies, and parking spaces with their parked cars) tend to impair the basic values of the Reserve just in proportion as they are conspicuously visible in the landscape. They cannot always be so placed as to serve their functions effectively and yet be effectively screened by existing natural barriers around them.. Within the limits assigned to each of them, as an unavoidable "island of artificiality" within the Reserve proper, such artificial operations should be made to produce a result as little conspicuous in the general natural landscape as is possible.

The forms, colors and textures of an artificial thing can be so devised in relation to its background as to make it grossly conspicuous; or, on the principles of military camouflage (which does not necessarily involve imitation of the background), so as to make it relatively un-noticeable. In some cases the most effective and desirable camouflage for one of these unavoidable "islands of artificiality" within the Reserve is, as an integral part of it, and strictly confined within its well-defined limits, carefully

chosen native plants, performing for it a function comparable, on a small scale, with the function of the "Buffer Zone" for service areas external to the Reserve proper. Even more than in the latter case, however, it is important, in order to avoid precedent for unjustifiable extension of artificial planting into the Reserve proper, to define such islands of permissible artificial planting with precision. This is attempted in Appendix \_\_\_\_.

Because of that danger no addition to the number of such islands and no extension of their planting beyond the defined limits should be authorized unless deliberately approved as a result of a review of conditions quite as thorough as the present one.

Beyond the limits of such "islands" planting in the Reserve proper should be absolutely taboo.

The only contingency justifying any departure from that policy, as in the case of the policy of avoiding attempts at "improvement cuttings", would be the definite ascertainment, by thorough comparison of future conditions with those recorded in the present study, that in the continued absence of certain specified operations for artificial control of the vegetation the primary values of the Reserve will, contrary to present expectations suffer serious and progressive losses, not otherwise preventable.