

POINT LOBOS RESERVE
~~CONTRIBUTIONS TOWARD A MASTER PLAN~~ REPORT

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Part I

FUNDAMENTAL CONSIDERATIONS

~~(See Part II for Notes on Items of
Special Landscape Interest, to be
correlated with reports by others
on items of interest from various
special standpoints.)~~

~~(See Part III for Specific Recom-
mendations as to Plans for Protec-
tion and Utilization of the Reserve.)~~

Sec. 1. WHY THE RESERVE WAS ESTABLISHED.

The land embracing Point Lobos was bought for inclusion in the State Park System (a) because the very peculiar physical characteristics of the locality have enabled many people to obtain here personal satisfactions of peculiar kinds which they have valued very highly, and of which the most highly valued are unobtainable elsewhere in like degree if at all, (b) because it was held to be of importance to mankind, in the present and ⁱⁿ future generations, to perpetuate the opportunity for enjoyment of these peculiar personal satisfactions by the many people who find them thus notably valuable, and (c) because there was obvious danger of the complete loss or serious impairment of such opportunity (by destructive changes in the physical conditions on which it depends, or by exclusion of the public, or both) unless the land could be acquired and administered for the definite purpose of preserving that opportunity in perpetuity.

To that end large contributions of effort and of money were made which enabled the State to acquire the property in order to guard against such dangers. And the State has assumed the duty of so guarding.

The practical question remains of just how that duty can be successfully performed.

Sec. 2. FUNCTIONS AND PURPOSES OF THE COMMITTEE

A. Formulation of Policies and a Master-plan.

The efforts of the Committee and its assistants are directed toward answering the above practical question: toward developing a comprehensive "master-plan" and set of controlling policies for determining what should be done and what avoided in order to carry out successfully the purposes of the trust undertaken by the State.

B. Study and record of physical characteristics and intangible values.

Both as a basis for such a plan and because of their direct value in promoting a better understanding and appreciation of what the Reserve offers, studies, analyses and records are being made (1) of the existing physical conditions, qualities and processes characteristic of the area, of how they have come to be what they are, and of factors liable to affect them in the future, and (2) of the human or subjective values derivable from any or all of these.

Such values are the ultimate measure of the worth of things to mankind. They are, in this case as in others, immensely various; and impossible of complete analysis or expression. They are in part mutually

incompatible at a given time and place, conditions favorable to some being utterly unfavorable to others; so that selection must be made, subordinating one desirable value to another which may be but debatably better, lest in grasping for both we get neither. Because of this necessity for selection and subordination some attempt at analysis and understanding of these intangible and elusive subjective values is essential, even though we know it must be very incomplete.

The most intelligible and least boresome way to indicate the nature of any of these intangible values is to refer to it in describing the physical conditions on which it depends. And throughout the documents which record and discuss various special aspects of the physical characteristics of the Reserve will be found many such references, indicating, or hinting at, the intangible subjective values associated in each writer's mind with the physical features in question.

Yet some connected ^{general} discussion of these human values, which are the real justification for the whole enterprise, seems unavoidable at the start in order to provide background and orientation for all that follows.

Sec. 3. "COMMERCIAL" AND "NON-COMMERCIAL" USES

It is important, for reasons which will appear later, to distinguish clearly what will be called ^{for short} "commercial uses" and "non-commercial uses". The former have been exemplified on this land by the quarrying and selling of granite; by the building and operation of a cannery; by lumbering and fire-wood cutting; by agricultural crop-raising and grazing; by stripping gravel from ^{"Public Beach"} Gravelly Beach both for sale in the past and recently by the State for road surfacing as a means of avoiding purchase of road-metal from other sources; by the frequent destructive stealing of cypress seedlings ^{by visitors} to avoid purchase of nursery-grown plants from seeds non-destructively obtained; and by more or less seriously destructive use of parts of the area as "locations" for commercial motion pictures, resulting in at least one case in very extensive and conspicuous denudation and erosion of soil.

Non-commercial uses have been exemplified by resort to the area by thousands of visitors for the direct, personal satisfactions obtained by them in looking at what they could see here, or in other personal experiences obtained through their visits (such as in scientific studies and in the largely social pleasures of picnics on the beaches) — ultimate satisfactions personal to the visitors and either

wholly unaccompanied by any economic gain to them or at least valued by them more highly as personal experiences than for any money's worth that might in some cases be got from them incidentally (as in the case of fishermen who come primarily "for the fun of it" though perhaps also somewhat pleased to save the price of buying a little food, or in the case of those artists who are more concerned with the personal satisfaction of appreciating and painting what they see than with the money for which their paintings may later be sold).

The essential distinctions between a commercial and a non-commercial use, as the terms are here used, are two. One is that the controlling consideration in managing the former is to "make money" for somebody (or its equivalent in money's worth); any direct personal satisfactions to anybody arising from these uses being subordinate considerations. Subordinate here means that they are treated by the management either (1) as means for attaining the money-making end, or (2) as by-products which are to be sought only in so far as they do not interfere with that main objective, and which are to be sacrificed in case of conflict therewith. By contrast, the controlling consideration in management of non-commercial uses is to produce direct personal satisfactions for somebody, valued for their own sake as ultimate objectives; any question

of money-making (or of money-saving), for anybody, being a subordinate consideration; though sometimes an important one in that the non-commercial objective can often be obtained only by means of using economic resources which are limited and which must be husbanded in order to attain the real objective as perfectly as possible.

The other distinction is that the relative values of any or all commercial uses can be completely compared and measured quantitatively because ~~is~~ the controlling, if not the only, objective in all of them is the same in kind — money value, the essential differences being only in amount; whereas non-commercial uses differ among themselves, and as compared with commercial uses, not only in the amounts of value they produce but in the kinds of value, and there are immense variations in the relative importance attached to different kinds of values by different people and by the same person under differing circumstances. A good night's sleep and going to a party offer different kinds of value, the relative importance of which is highly variable.

Notwithstanding such variations it can usually be determined very positively for a given person or group of persons, under given circumstances, that a certain use, or activity or thing, is definitely more (or less) valuable than another; sometimes by a small margin, sometimes to an immense degree. And thus the value of a non-commercial use, though

never directly and definitely measurable on a money scale, can often be very positively rated as either moderately or immensely greater (or less) than that of something which does have a definite commercial or money value.

Returning to specific kinds of use of the Point Lobos area, it is to be noted that, in addition to the commercial uses actually made of various parts of this land, there are many other potential commercial uses for which it has been, and physically still is, capable of being used. The most notable of these has been the possibility of subdividing and marketing the land as building lots for money-profit; a possibility which has of late years mainly determined its market price. But that market price represents the general estimate of the entire capitalized value of the privilege of using the land for any and every possible commercial use — sums up the total estimated present value of all possible ways of using the land to "make money" for anybody. Now the land was bought and paid for and included in the State Park System after ~~a~~ very careful deliberation and with the aid of very large voluntary contributions for that specific purpose, not at all because of any idea that the State could operate it better than private

owners as a means of making money for anybody, but precisely because its continuing use for other than money-making purposes -- its use in ways that can give value to the using public in direct personal satisfactions, such as many people had been getting from parts of it for years on sufferance -- was held to be worth much more to the citizens of California than the dollars of its market price which measure the value of all possible commercial uses of it, and because such purchase was believed to afford reasonable assurance of the complete and continuing subordination in its management of commercial motives to the fullest possible attainment of these admittedly greater non-commercial values. The decision was fundamental in that respect as to policies of management.

No one has proposed, or is likely to propose outright, that the State should reverse this decision and either sell the land again or in its management of the property subordinate the attainment of these non-commercial values to any purpose of making money out of the property, either for the State or for somebody else; yet the principle deserves a little further clarification on two points.

(a) Quasi-commercial Returns to the State as Operator: Legitimate and Illegitimate.

The State is now collecting a money charge for the privilege of operating automobiles within the Reserve, thereby producing a quasi-commercial revenue as a partial offset to the money-costs of operation. It might conceivably obtain considerable revenues by selling or leasing privileges of using the Reserve in other specialized ways, either direct to the "ultimate consumers" or to commercial concessionaires operating for profit. Bathing beaches, restaurants, dance halls, golf-courses and many other revenue-producing uses have been so operated in public parks elsewhere.

The practice by former owners of selling gravel from the now largely denuded ^{Rubble Beach} ~~Gravelly Beach~~ has been discontinued; but the State has continued to take gravel therefrom for the essentially commercial purpose of avoiding purchase of other (and better) material for road surfacing. *

Can any of these practices be regarded as legitimate, as squaring with the fundamental decision of policy just above mentioned? And if so where is the line to be drawn?

The principle determining the answer to such questions seems very clear even though its proper application to specific cases requires constantly alert intelligence, clear thinking and intellectual honesty. The mere fact that any given use of the Reserve does, or does not, result in a cash revenue or a cash saving to the State, is no criterion of its legitimacy or illegitimacy. The first criterion is whether its effect and tendency, all things considered, and under the conditions to which the use would be subject, would increase or decrease those non-commercial values obtainable by visitors to the Reserve which are the real justification for the whole enterprise. If it would tend to decrease those, then the use cannot be justified by any monetary advantages it might offer. If under suitable conditions it would tend toward a net increase of those values, the next criterion is whether obtaining a revenue (or a money saving) in specified ways from the use in question would substantially diminish its beneficial effect on those dominant non-commercial values. If so, the money-making procedure is still not justifiable. If not, it may be a subordinate but additional justification for the use.

In the case of the toll charge to visitors for operating automobiles in the Reserve, it appears: (1st) that the admission of visitors in automobiles, although in some respects diminishing the values obtainable by others from the Reserve, is likely, on the whole and subject to certain limitations as to where and how the cars are operated and as to their numbers, to increase rather than to diminish the values properly obtainable by the public from the Reserve; (2nd) that a charge at approximately the present rate, and in connection with the policy of admitting without charge those who are willing to walk from the gate to their destination in the Reserve, tends to make the net effect of admitting automobiles more beneficial rather than less, mainly for the following reasons. Although the use of automobiles in the Reserve is beneficial in some degree, from large to very small, to most of those who use them and so long as they are using them, chiefly as a convenience in getting to points where other uses are to be made of the Reserve, this use of cars and the mere presence in the Reserve of considerable numbers of cars and of the roads and parking spaces necessary thereto, are appreciably detrimental to the values derivable from other uses of the Reserve, both by those who enter it in cars and by others. With increase

in the volume and pervasiveness of automobile use beyond a very moderate amount that detrimental effect tends to increase much more rapidly than the aggregate benefit received by the users of the cars. The tendency of the charge, therefore, is to counteract a very real danger of the expansion of automobile use of the Reserve beyond the stage at which it would begin to cause rapidly diminishing returns from the Reserve as a whole. Furthermore, it is an important fact that the real values in personal satisfactions derived by different people at different times from using a car in the Reserve differ enormously. In some cases they are very great. In some cases they are so slight, for the only people who get any benefit from them at all, as to afford no reasonable justification (1) for them to pay even a small toll charge, or (2) for the payment out of State revenues of the economic costs which their operation of additional automobiles in the Reserve entails, to say nothing of (3) the non-economic losses in value which their use of the Reserve, with little or no ^{net} benefit to themselves, causes to other visitors.

The beneficial selective effect of such ^{toll} charges in minimizing wasteful uses of the Reserve — uses that are not worth to anybody what they cost — might be bought at far too high a social price if they also excluded any

considerable number of people who would really get much value from using the Reserve but who cannot reasonably afford to pay the toll. Very few, however, who would be deterred from using any part of the Reserve by the alternative method of a few minutes' walk from the free parking space at the gate could be said to place a very high valuation on the opportunity to use it.

In short, both the use of automobiles in the Reserve (under suitable limitations), and the collecting of a reasonable toll for the privilege of such use, tend to make the direct, non-commercial values obtained from the Reserve by all visitors greater than they would otherwise be, and are justifiable solely on those grounds.

The revenue obtained from the tolls, therefore, appears to be all to the good, as a by-product. If, however, such revenue were to be considered not a subordinate by-product but a controlling objective -- if in so far the Reserve were to be run on a commercial basis -- the tendency would be to stimulate increase of automobile traffic in the Reserve indefinitely even by sacrifice of the basic non-commercial values; as, for example, by looping an automobile road through the heart of the best cypress grove as "bait" for catching more tolls.

Other cases can be figured out on the same principles. The case of saving money on purchase of

Pebble Beach

road-metal by further stripping of Gravelly Beach is very different from admitting automobiles, with or without a toll charge; because unlike the latter its effect is not in any way or under any conditions beneficial, but directly and wholly injurious, to the justifying values of the Reserve. It is no excuse to claim that "it is a little baby", that it is obviously much less seriously injurious than to cut down the Cypress trees to save buying wood. In the case of the complete absence of funds for purchase of road-metal it were better to leave the roads temporarily unsurfaced even if it meant temporary curtailment or elimination of automobile use than to countenance using the Reserve as a mine of raw material in disregard of its prime purpose. No net injury to the primary non-commercial values of the Reserve, however slight, if it can possibly be avoided without incurring some other and greater injury to the values of the same primary kind, can ever be justified merely as a money-making or money-saving device.

(b) Indirect Commercial Returns to Citizens of the State from Operation of the Reserve.

Incidentally to the maintenance of the Reserve so as to give visitors to it in the largest possible measure those direct, ultimate, personal satisfactions of non-commercial kinds which are its justifying purpose, some

indirect commercial advantages are practically certain to accrue to various citizens of the State; as through business with tourists and others influenced by the existence of the Reserve and by the opportunities it presents.

This is all to the good, as a by-product. But the justifying purpose for creating and operating the Reserve is no more that of enabling certain groups of citizens to make money out of its use as a "drawing card" than it is to enable the State to operate it at a cash profit. As in the case of questions involving direct revenue (or saving) to the State, the controlling consideration, to which all others are subordinate, is how to obtain for the actual visitors to the Reserve, in the long run, the greatest possible values of those ultimate and non-commercial kinds for the safeguarding of which the land was taken out of the commercial market.

Pressure is likely to be exerted from time to time, often in perfectly good faith and in the sincere belief that commercial values are of controlling importance in this as they are in so many undertakings, to have the Reserve managed essentially as a "drawing card" so as to boom volume of attendance, especially with a view to its possible favorable repercussion on trade, even by means

which will not increase but actually diminish the aggregate of real values obtained from the Reserve by those who visit it. Such pressure needs to be firmly and intelligently resisted. Otherwise it will, by indirection, shift the management of the land back to a basis where the controlling considerations are essentially of a commercial sort, the non-commercial values being regarded only so far as they do not seriously conflict therewith. For such essentially commercial objectives the land would probably be more profitable in private ownership.

Sec.4. WASTEFUL KINDS OF NON-COMMERCIAL USES VS. THOSE PRODUCTIVE OF HIGH VALUES

There are many uses, desirable enough in themselves and more or less appropriate as functions of a State Park System, for which this land is so unsuitable that it would be outrageously wasteful and extravagant to attempt them here.

This may be true of uses as to which it is less immediately obvious than it would be of a proposal to provide here for ice-skating and other winter sports by artificial refrigeration, or for an exhibit of desert vegetation by means of air-conditioning under glass. For example, there are in the Reserve several meadows where a series

of base-ball diamonds could be provided without much expenditure for labor or materials; and a considerable public use of such facilities might develop, to some degree spontaneously and to a large degree if suitable systematic "publicity" and organized effort were devoted to "popularizing" that use of the land. Yet such use of this Reserve would be positively wasteful and extravagant in at least two respects. First, in that the same use could be admirably provided for on very much cheaper land, more readily accessible to most of the users, and under conditions physically more favorable to this particular use. Second, in that its introduction here would seriously impair the values obtainable by the public from certain other uses of the Reserve for which it is peculiarly well-adapted, some of which uses indeed cannot be provided for elsewhere at any price, and the perpetuation of which in a high state of perfection was the justifying reason for acquiring this particular land and paying the price for it.

Under such circumstances for this particular land, the ball-field use must be rated as definitely wasteful.

Just what alternative uses are likely to be productive of the greatest values which this particular Reserve is capable of rendering will be discussed below. The point to be made here is that the relative wastefulness, or value, of different possible kinds of use of this Reserve, depends

much more on the special purposes which this particular land is physically best fitted to serve, and which afford specific justification for buying and administering it, than it does upon any one's ideas as to what uses it is more important, in the abstract, to provide for somewhere. It is not as if the citizens of California had to choose between being deprived of the opportunity of playing baseball and watching baseball games, anywhere, and being deprived of the opportunity of using the Point Lobos Reserve to obtain other special values obtainable only at that place. If that were the case and if a state-wide referendum were called for, more people would presumably prefer the baseball values than would prefer the other values. But since it is not the case, the existence of even a widely predominant abstract preference for baseball would not make the use of this particular Reserve as a baseball park other than grossly wasteful.

Dogs can be used as companions and friends. Dogs can be eaten in lieu of other food supplies. For every one, in the last analysis food is more vitally important than the companionship of a dog, and there are a good many people who do not value the companionship of a dog under any circumstances. But it does not follow as a generally applicable proposition that a companionable dog is worth more as meat than as a companion; and it is perfectly clear that by no possible compromise can these two uses of a dog be successfully combined.

If, under given circumstances, one use is the more valuable by the slightest margin, the other use is positively wasteful.

Such absolute incompatibility between alternative possible uses of the Point Lobos Reserve can seldom be shown; but in a great many cases one use would be so largely destructive of the value of another use which is here more important, or would involve such imminent danger of destroying that value, as to be practically incompatible therewith. If so it falls into the class of definitely wasteful uses which ought to be absolutely excluded.

Other possible uses are compatible with more valuable uses only within certain limits and under certain conditions, and thus fall into the class of permissible but subordinate uses, the values of which are by-products to be sought here only in so far as they do not endanger the values derivable from uses that are, for this Reserve, more essentially important.

Finally, there is the class of primary uses: those which are capable of rendering the kinds of values that are among the greatest obtainable from this particular area, which are sufficiently compatible with each other to involve only a minimum of conflict and to require the subordination of one to another only at special points and in ways not greatly restrictive of the value of either, and which in combination can give the greatest net values practically obtainable from the Reserve.

To determine what may properly be regarded as primary uses we must look first of all for those non-commercial uses of this area which have been, and are likely to be, very highly valued by those who actually experience them.

Sec. 5. A CLUE TO WHAT THE GREATER VALUES ARE

The values with which we are here dealing are those of the personal satisfactions obtained by visitors to the Reserve. They depend on objective physical features and conditions of the locality which can be studied and recorded. But they themselves are subjective and intangible; very difficult things about which to get dependable knowledge, yet none the less facts -- facts which are the real measure of the usefulness of the Reserve.

In order to judge, as truly and objectively as we can, what are the more important and distinctive of these intangible values derivable from the Reserve, the best clue we have is to inquire what values have in fact appealed most strongly to those who know the area well and who have shown evidence of finding there something that they really do value highly.

Among these are visitors who return repeatedly, but especially those who do so at a considerable sacrifice of time and other values, and those who do not appear to

come mainly for something that is extensively available elsewhere (as is the case with gathering sea-food supplies or taking part in "social-function" picnics). Particularly significant, at least so far as their points of view are widely representative, are visitors highly trained and skillful in appraising special kinds of intangible values, whether primarily esthetic, as in the case of many painters and other artists, or primarily intellectual as in the case of many specialists in science. Foremost, perhaps, because of the indisputable evidence which they have given that what they value here they value highly, are those whose contributions of effort and money resulted in the acquirement of the Reserve.

Certain facts stand out about the values which have most strongly appealed to these many kinds of people.

Sec. 6. OUTSTANDING FACTS ABOUT THE GREATER VALUES

1. Their Special Association with the Cypress

Headlands and the Shore.

It is a fact that the physical features of the Reserve with which the great values in question are especially associated are the cypress trees, Cypress Point as a whole, the adjoining headlands and shores and tumultuous seas in the northwesterly part of the Reserve, and to a lesser extent other parts of the shore and its immediate vicinity.

This is not to say that important values are not found in other parts of the Reserve; but these are in general found to be much less great and less distinctive. This fact will help us to concentrate in this general discussion on one outstanding group of values, leaving all others for later consideration.

2. Their Two-fold Source — ^{Sensory} Sensual and Intellectual.

The outstanding values obtained at Point Lobos by these people are, in at least one important respect, like the values obtainable from all "great" works of art, and from all those aspects of nature which men have held to be "great" in the sense of greatly inspiring the human imagination and emotions. They derive from an inextricably complex interaction of two logically distinct sources of emotion, each potentially strong in itself.

One is the direct, immediate quality of the sense-impressions received; felt in themselves as "beautiful" or otherwise emotionally uplifting, regardless of any "meaning", of any ideas or associations that may be aroused in the mind by the sensations. The other is the quality of the meaning — the quality of the whole train of ideas, associations, thoughts, etc., aroused in the mind by the sensations.

Now it is a fact, which any painter or competent student of such matters will confirm, that the simple, direct

sense-impressions obtainable through the eye in the Cypress Headland region at Point Lobos, purely as a matter of colors, textures, intensities, "lines", etc., etc., (there is no need to go further into the painters' jargon any more than into the psychologists' jargon) are in general of extraordinary beauty in themselves, regardless of what the things are that produce them and regardless of any meaning they may suggest to the mind of the observer.

It is also a fact that what is seen there arouses a mental something in every observer -- some inkling, at least, of the meanings with which the facts of nature here are pregnant for the human mind -- a something which for most is powerfully arresting and inspiring. This mental something is inspiring even to those for whom the meanings are vague, transitory and superficial. With deeper insight it may give birth to thoughts vastly more inspiring.

This mental something is strongly felt by some who are less sensitive to the immediate sensual beauty; and vice versa. The point here to be emphasized is merely that the more valuable personal satisfactions characteristic of the Cypress Headland region of the Reserve, and to a large extent of its other regions, possess in high degree that complexity, richness and depth made possible only by the happiest combinations of these two opposite sources of emotional exhilaration: ^{sensory} sensual and intellectual.

There is much practical significance in this, in relation to what should be done and what avoided in order that people may obtain the greatest possible values from the Reserve. Both in safeguarding those physical factors of the locality on which the values chiefly depend, and in otherwise aiding people to obtain the values latent therein, it must never be forgotten that the greatest and most inspiring values are to be had only from the united effect of these two kinds of sources, ^{Sensual} sensual and intellectual, with each at a high pitch. Whatever contributes to the clearer, deeper, fuller appreciation of the inspiring intellectual significance of the natural characteristics of the place is in itself good; whatever obscures or confuses that significance is in itself bad; granted, in either case, that the inspiring ^{Sensory} sensual qualities — the directly felt beauty — be undiminished. Whatever maintains or enhances the latter is in itself good; whatever impairs ^{and} ~~or~~ confuses it is in itself bad; granted, in either case, that there be no substantial diminution of the inspiring significance of what is ~~seen~~. To permit the serious impairment of either the ^{sensory} sensual beauty ^{or} ~~of~~ the intellectual significance would be to lose what makes Point Lobos one of the "great" inheritances of mankind.

3. The Dramatic Unity of their Intellectual Elements.

Again as in the case of great works of art, what people observe at Point Lobos arouses meanings as manifold and as greatly inspiring, or as little, as the knowledge, imagination and other mental qualities of the individual permit. These meanings are so varied as to defy analysis.

But to a notable degree they have something in common which gives them a powerful dramatic appeal and a way of re-enforcing each other. This is that most of them relate to very inspiring phases of a single tremendously dramatic theme -- the everlastingly repeated and ever-varied impact and reaction of the forces of land and sea.

When the seas are running high, as here they so often do, the heaving, bursting and drag of the huge waves, their spectacular impact upon shore-forms of extraordinary variety, grip the attention and rouse the emotions of every one without exception, through stirring the mind to some appreciation of the vast power and significance and dramatic quality of the forces here at work. But on every hand, and in every kind of weather, other phases of the same great drama become apparent, more and more impressive as one's understanding grows. The wonderful functional adaptation of a richly varied vegetation, marine and littoral, to the impact of waves and currents, of ocean

winds and wind-borne spray and spume and fog, from the lithe sea-weed up through the tapestries of rock-plants to the gnarled cypresses and wind-moulded pines: the cypresses in themselves telling a poignant story of survival in a battle against great odds, twisting and buttressing themselves against the thrust of wind and pull of gravity, extracting vigor from the driving sea-fogs and adapting themselves to drenching sprays of salt that sometimes crust the soil with white and rout the advance of other trees; whole communities of living things shaped in every vital detail to play their strenuous parts in this everlasting drama of the sea and shore -- visibly so shaped, not only in direct response to these pervasive forces of the sea and wind but in response to conditions of soil and rock which are themselves in form and structure the outcome of the same unending reaction of sea and land; some of the rocks now crumbling visibly before the eyes, grain after grain; some of the rocks plainly formed in long past ages out of pebbles on beaches not unlike the present, then buried deep until a new uplifting of the continent enabled the sea to cut those other less ancient beaches which we see on the hillsides, terrace below terrace, until it reached and hammered into the same ^{old} beach conglomerate again and began to rattle its veteran pebbles back and forth in the surges of today and with them batter

out new clefts and chasms and caves where planes of weakness had been formed by the continental heavings; infinite are the variations of meaning relating to this single dominant theme, immensely inspiring in their significance, and expressed in forms of exceptional sensual beauty.

Even such sketchy and inadequate hints as these may serve to suggest the nature of what may be called the dramatic unity of significance at Point Lobos, on which so much of its inspirational value depends even for those whose attention is consciously arrested by but a few fragments of the meaning latent in all they see. They suggest, too, the inspirational value of almost any increase in one's understanding of the significance of elements related to this dominant theme, and the importance of avoiding any emphasis upon elements tending to distract attention from this dominant inspirational theme.

4. Their Essential Dependence on "Natural" Conditions.

That it is the "natural", not the "artificial" characteristics of the locality which give rise to its great values and which are essential to their continuance is an obvious truth.

It is no less obviously true and no less fundamentally important because of the difficulty of clarifying the meaning, in this connection, of those vague terms "natural" and "artificial".

(Continuation of Part I to follow)

Consider two contrasting cases: comparably high, steep faces of granite, with more or less angular fragments of granite in and near the water below them; one near the southwestern base of the ^{Big} Little Dome promontory and the other at the quarry on Carmel Cove. The former is one of those characteristic and impressive features of the Reserve on which its great inspirational values depend. The quarry is nothing of the kind. It is an "artificial" affair which, mainly because of its very artificiality, subtracts from the distinctive values of the Reserve rather than adds to them. The Little Dome Cliff and talus appear to be, and in any ordinary sense of the word are "natural"; while the quarry is unmistakably "artificial" ("made or contrived by art, or by human skill or labor". Century Dictionary).

The radical difference in the inspirational value of these two features of the Reserve, and the difference of naturalness and artificiality on which it largely depends, are real and important; and cannot be invalidated by any hair-splitting argument which proved, as might probably be done with ease, that in both cases the existing conditions are the result of infinitely complex causative processes which reach back in part into the remote geologic past and that among the more recent factors influencing the result in both cases in some degree must be reckoned action by human

"artificers", who have in the case of the quarry dislodged numerous fragments of granite by a complicated technique of blasting, etc., and in the other case have dislodged fewer fragments by simpler means, such as kicking, pushing and prying (as they may have been actually seen to do, perhaps for the pleasure of making the rocks topple and crash).

But proof that these ^{Big} Little Dome Cliffs had been artificially manipulated to some such minute degree would not make it otherwise than grossly misleading and essentially untruthful to say "These cliffs are artificial, even though to a much less degree than the quarry".

Things are properly called "natural in contradistinction to "artificial" if they are not artificialized to a significant degree. And "significant" means significant as to those matters or questions which happen to be under consideration.

Evidence that some one had pried a rock off the Little Dome Cliffs by artificial means, and that they were even to that small degree artificialized, would be highly significant in the matter of convicting that person for infraction of park rules. It would be highly significant as to questions of policy in framing and enforcing such rules; because of the obvious probability that continued repetition of such actions would ultimately produce a degree of artificiality

seriously injurious to values dependent on the naturalness of the cliffs. It would probably not be significant of any loss of naturalness, already accomplished, that would reduce by the slightest appreciable degree, the inspirational values derived by visitors from the natural qualities of the cliffs.

There are few parts of the Reserve of any considerable extent which do not show on careful examination some evidence of pervasive past activity by human artificers: long-buried shells left by prehistoric Indians; wide-spread evidences, some obvious and some almost imperceptible, of tree-cutting, burning, plowing and grazing due to white-men; European weeds that came in with such activities; roads and trails and trampled ground or signs which show where these have been, to say nothing of the various little buildings. But, for all that, what chiefly impresses and gives satisfaction to intelligent and observing visitors to the Reserve is, as above stated, not any of the numerous elements of artificiality but features and characteristics which they rightly regard as "natural" in the sense that the influence of human artificers in their causation, if any, seems relatively insignificant. So far as these visitors are aware of elements of artificiality

as such, they regard them in general as more or less negligible incidental features; some wholly regrettable, others more or less acceptable because of their utilitarian convenience. This prevailing slight and frequently adverse effect of the artificial features of the Reserve upon its major inspirational values is due not merely, or chiefly, to their lack of qualities such as make some products of human skill and labor inspiringly beautiful works of art -- a lack which might conceivably be made good by designing artificial features with greater artistic skill. On the contrary it is inherent in a conflict of significance between the artificial and the natural features, a conflict which tends to become more injurious just in proportion as it is emphasized by any increase in the assertiveness of the artificial elements, even when that increase is due to qualities wholly admirable in themselves.

It has been pointed out that the great inspirational values of the Reserve are intimately bound up with the significance, even though imperfectly perceived, of a stupendous drama of interacting forces associated with the meeting of sea and land. In that impressive drama, as enacted through the ages on this

shore, many species of plants and animals have had important roles to play, but among them all the species man has had one of the least influential. Coming upon the scene very recently, he has engaged in a few successive spasmodic activities so inconsistent one with the other in their effect upon the general course of events that they have tended to "cancel out", while the more self-consistent activities of other natural organisms and the timeless inorganic factors of nature have continued to pursue their momentarily deflected but persistent evolutionary trends.

The relative insignificance of man in this great drama can be realized by comparing his part with that of his fellow-creatures, the ground-squirrels and the gophers, which have upon this site for countless centuries been moving countless tons of soil each year, and reacting all that time in an undeviatingly persistent way upon the slowly evolving successions of plant life and on the cycles of erosion and deposit that have shaped the land.

Now it is clear that whatever draws attention to the doings here of man the artificer, as such, in contrast to the rest of nature — whatever emphasizes his

importance, or his own conceit that he and his artificial doings are here of great significance -- is manifestly impertinent to and contradictory of the entire tenor of the thoughts and emotions that are inspired in every visitor, however vaguely, by the great drama here spread before him.

Elsewhere, at countless places and times, expressed in countless works of art and in countless utilitarian structures not consciously esthetic, immense inspirational values inhere in the theme of man the triumphant artificer -- dominating his environment, shaping it to his will. Without question this can be a grand and stirring theme -- even if some of us get a little tired of it at times. Equally without question it is discordantly antithetic to the theme into which the great inspirational significance of Point Lobos is woven.

Of course much more is involved in this matter of "natural" and "artificial" conditions at Point Lobos than is explained by this analogy with the inspirational unity of a drama: yet it strikes near the root of the matter as far as concerns the primary justifying values of the Reserve; for these are clearly inspirational

and clearly derive much of their emotional power from a profound and real unity of significance, which we have crudely symbolized as that of a drama of the forces of sea and land.

Most of the features and conditions "natural" to the area are intimately related to that central theme. Certainly there are very few, if any, the significance of which, when rightly understood, is impertinent to it or contradictory to the feelings it inspires. And the reverse is generally true of "artificial" elements so far as they draw attention to themselves as such. That is the chief controlling reason why the natural elements ought to be protected and safeguarded with the utmost care and skill and self-restraint, and its artificial elements ought to be minimized and made as little self-assertive as possible, even though we have to recognize that the latter can never be wholly eliminated.

Sec. 7. PROTECTION OF NATURAL
AND SUBORDINATION OF ARTIFICIAL ELEMENTS

Even if the Reserve could be completely barred to human use, like some "holy of holies" of an irrational quasi-religious nature-worship, the inevitable sequence of cause and effect would continue to perpetuate in it forever some consequences of past human interference.

Practically, it must and will be used; and in such use new human interference will occur. But except so far as persistently repeated human interference continues to set the process back, the relatively stable natural factors (climatic, geologic, biotic) can and will continue the evolution of the area in predetermined directions, never magically making the landscape exactly what it would have been if man had never changed it, but generally tending to diminish and obscure the evidence of past human interference.

The above considerations point to certain basic principles that should govern the design and construction of utilitarian artificial features required for reasonable use of the Reserve by visitors. First, they should be made as little conspicuous and self-assertive as practicable. Second, they should be as far as practicable such that the processes of nature acting on them and their surroundings will make their artificiality gradually more and more inconspicuous, without so destroying their utility as to require frequent reconstruction with its renewed emphasis on their artificiality. Third, in seeking to make them inconspicuous, regard should constantly be paid to the danger that anything artificial which so closely simulates a natural condition as either to be mistaken for it or to look like a poor imitation will, upon recognition for what it is,

be far more offensive and disturbing than one which carries no such suggestion of intentional deceit. Fourth, no such artificial feature should be introduced unless and until it is clearly evident, when considered from every point of view and in the light of all the knowledge that can be brought to bear on the question, that the probable consequences of omitting or postponing its introduction would be so adverse to the justifying values of the Reserve as to outweigh the certain adverse effect of another artificial feature.

But in addition to such definite artificial features deliberately introduced or maintained for utilitarian reasons, various administrative decisions are likely to cause deliberately or inadvertently, knowingly or unknowingly, important changes both for the better and for the worse in the conspicuousness of other evidences of artificiality present in the landscape, and in other qualities affecting its inspirational value, especially through affecting the always changing vegetation and animal life of the Reserve.

There is so much we do not know about the complex interrelationships of cause and effect in the evolutionary development of an area like this, predominantly determined

by "natural" factors but with an inextricable admixture of "artificial" factors, that the utmost caution should be used about artificially altering any of those factors, lest the effect prove destructive in unanticipated ways to the great values which the place certainly now has for mankind. Because of our limited knowledge this danger is involved not alone in new artificial interferences with predominantly natural conditions, but also in attempts at "aiding nature" to obscure regrettably conspicuous evidences of past interference, and even in putting a stop to various human activities of the recent past which are clearly injurious in some ways but the cessation of which might set on foot unforeseen developments injurious in other ways to the major values.

We can not as yet determine with much confidence how far, if at all, the characteristic and inspiring qualities of the cypress growth, for example, as we now see it, or of the interlocking meadows and pine woods, as we now see them, are a peculiar product of the interaction between natural factors and the human operations which also have affected them intermittently for many years, such as the extensive tree-cuttings and repeated serious fires of the 19th Century. Because we know so little, and

because the values at stake are so great and so irreplaceable, the only safe policy is to proceed with the greatest caution. While watching and studying closely to increase our understanding of the complex processes, every case in which there is any reasonable doubt as to the wise course of procedure should be dealt with on the principle of allowing the relatively stable and constant natural factors to act freely, with the least possible interference by man, upon these mixed yet predominantly natural conditions which now exist and which are upon the whole so extraordinarily valuable and so easily impaired by human interference.

The phrase "reasonable doubt" as above used requires explanation, for on its interpretation hinges the whole meaning of the statement. It does not mean that the presumption in favor of a "hands-off" policy can rightly be disregarded, and something done by artificial means to alter or control the development of the landscape, whenever some one in a position to act has no personal doubt that it ought to be done and does not happen to know of any objection that seems to him reasonable. That would be risking far too much on the omniscience of a single individual or on his happening to have received wise

advice. But equally it does not mean the adoption of a rigidly inflexible policy of attempting to "let nature take its course" under the influence of such human interferences only as have already occurred or may without deliberate intent occur in the future, regardless of the results toward which that course may lead. It means rather that the principle is a general rule, to be followed except in cases which have been thoroughly canvassed by a group representing a wide variety of knowledge and points of view and having intimate familiarity with the Reserve, resulting in a general, even if not unanimous, agreement that the proposed artificial control is less dangerous to the values of the Reserve than continuance of a "laissez-faire" policy.

Even with that precaution errors of judgment will be made, mainly because of limited understanding of the complex processes of a slowly evolving landscape; and such a group should constantly or periodically review the evidence of what is really happening and likely to happen to the justifying values of the Reserve so as to avoid perpetuating serious mistakes. They should, however, hold fast to every earlier decision that is not clearly proven wrong, since continuity of policy

if it be not definitely wrong is far better than vacillation between alternatives, either of which is defensible.

These questions of where, when and how there is justification for further deliberate artificial interference with the "natural" evolution of the landscape from its present condition of naturalness partly admixed with artificiality are so puzzling that it seems worth while to discuss a few cases in some detail.

There are some cases where a "hands-off", waiting policy would be indefensible. For instance, the most fanatical advocate of "letting nature take its course" would hardly advise that the old cannery buildings should be left in situ for gradual dissolution by the slow but inexorable processes of nature.

There are other cases where it seems equally clear that a "hands-off" policy will be the wisest ^{course} in the long run even though it involves really serious temporary losses in value. During the short time this piece of coast has been under observation by white men extensive erosion has taken place. It is as certain as anything can be that continued erosion will, in the absence of artificial control, engulf considerable pieces of ground now bearing beautiful and valuable vegetation, including

cypress growth properly to be described as "priceless". Such erosion can be stopped only by opposing to the sea artificial barriers progressively extended and renewed again and again, for as many centuries or millenia as men persist in holding the tireless waves at bay. The cypress growth might thus be enabled to continue its life cycle century after century on the same spot, instead of making a slow, strategic retreat as it has doubtless done for centuries past: and the surf might beat as spectacularly on such continually renewed artificial fortresses of masonry as on the slowly crumbling native granite: but the great inspirational significance of the headland, and much of its characteristic sensual beauty, would be progressively emasculated by this continually extending artificiality at the most dramatic and significant place in the entire scene. The ultimate price of entering on that sort of artificial control at Cypress Point is far too great to justify it.

It has been seriously proposed that the superb old cypress precariously rooted on the rapidly receding brink of the sea-cliff southwest of Little Dome be saved from threatened engulfment by building under it a retaining wall some fifty feet in height. This tree is of such

unique beauty and interest that its loss, whenever it occurs, will be a great calamity. Such a wall might probably prolong its life for many years, possibly for a century or so; although the evidence now at hand about the maximum age attained by cypresses under any conditions makes the latter figure doubtful. But such a wall, no matter how designed and built, would be a huge and conspicuous expression of man's intention to assert his supremacy over one of the most powerful, persistent and dramatic of the natural processes characteristic of the Point — the timeless battering and grinding of the sea upon the shore. And soon the same question would arise at another part of the Cypress Shores. To enter on the progressive permanent artificializing of those shores is far too great a price to pay for a temporary prolongation of the life of even such a tree as this.

Let us take two speciously similar cases that are closer to the border-line of doubt. Along the low south shore of the Reserve, also, the sea is eroding relatively fast, in sandstone, shale and conglomerate, overlain with a few feet of what appears to be mainly residual soil clothed with nearly horizontal meadows reaching far back into the woodland except where ridges of harder conglomerate between them stand up as witnesses of greater

resistance to the earlier cycle of erosion that planed off the meadow spaces.

The rate of erosion at Pebble Beach has almost certainly been much accelerated by artificial removal of all but a remnant of the hard pebbles which formerly spread a protective layer over the soft rocks. Quite certainly the erosion of the meadow edge is now going on so fast in places that it is likely to reach and undermine the road during a heavy storm in the near future. There will be much loss of values if in the next hundred years or so there is extensive erosion of the meadows. It would involve a further serious loss of values to abandon the road along this shore or to move it back at the price of cutting great scars into the conglomerate ridges.

One of the points where the road is in most imminent danger of being undermined, and where it cannot be moved back at all without calamitous scarring of a very beautiful adjoining ridge, is north of Pebble Beach, where a fault plane makes a very narrow weak spot close beside the hard conglomerate. Here some artificial checking of sea erosion seems clearly justified, as the

only alternative to the complete exclusion of automobiles from this region. It could be effectively done by 20 or 30 feet of concrete wall and parapet along the outer edge of the road; but that, especially if neatly smooth and painted, would be most unpleasantly conspicuous in its artificiality. The least objectionable solution esthetically, which happens also to be the least costly, is apparently to face the narrow seaward bank of the road in this gulch with large rudely piled pieces of sea-weathered granite, obtainable from the waste pile at the old quarry on Carmel Cove: for the reason that the color and the light-and-shade effects of such a protection would be sufficiently harmonious with those of the adjacent natural conglomerate not to be strikingly conspicuous as an introduced artificial element, while the very difference in material avoids too close an approach to shamming something natural. So far, so good.

Along Pebble Beach the border-line of doubt is very closely approached. If it were possible to check the erosion of Pebble Beach by dumping back on it the identical loads of gravel formerly removed from it (as it is possible to dump back on the Carmel Cove Beach a considerable storage pile of gravel recently removed therefrom) that would

certainly be a reasonable "interference" — a mere return of artificially removed material which the waves would quickly sort out into an honest-to-goodness natural beach. This being impossible, the question arises whether it is practicable, and if so whether it would be wise, to supply enough pebbles from another source to check the erosion again. If the pebbles were derived from the same type of conglomerate as those "natural" to this beach an extreme purist might regard this as nature faking. But what are the alternatives? One is to use a granite rip-rap, or some similar protection, along the edge of the road when and as the erosion reaches it, this artificial shore protection being gradually extended as need arises until in the course of many years it stretches along the whole length of the former beach between two rather distant ridges of harder rock. Another alternative is not only to discontinue the road but to accept the continued and progressive erosion of the meadow at an unnaturally rapid rate.

Here, as in so many other cases, choosing between a "hands-off" policy and one of deliberate control is not one of choosing between "natural" and

"artificial" conditions. It is one of choosing that course which is most likely, in the light of our necessarily limited knowledge, to minimize the adverse effect on the great inspirational values of the Reserve of the artificial factors taken as a whole, many of which have already been introduced and have started chains of consequences that can never be stopped, even though their course may be diverted or modified. Because we have ^{such} limited knowledge of the complicated processes of change in a predominantly natural environment, any forecasts of the long-time effect either of a "hands-off" course or of a deliberately directive control are uncertain. Decisions, however, must be made in the light of all the knowledge we have, and they should be adhered to firmly unless and until they are clearly shown to be mistaken. To avoid persisting in seriously mistaken courses, either of unwise deliberate control, or of unwise failure to control trends that endanger important values, there must be constant, close and detailed study and record of all observable changes. If and when gradually increasing knowledge of the actual processes of change and their trends, periodically reviewed with the most careful deliberation from many standpoints, clearly shows an alteration to be needed in some administrative policy previously adopted, that alteration should be made. Never otherwise; upon whim or individual judgment.

The foregoing cases relate ^{only} indirectly to the vegetation and animal life of the Reserve, as to which wise limitations on artificial interference are peculiarly difficult to indicate. The communities of plants and animals are characterized by continual changes visibly active not merely from decade to decade but from season to season, from day to day, and even from moment to moment. These changes are in the main ^{essentially} repetitive in cycles of amazing constancy but in part involve progressive alterations evolving sometimes very slowly, sometimes rapidly. And both these kinds of change are inevitably influenced by what is done and what is left undone by man.

The complex interrelationships of cause and effect in these communities of living things, the sensitiveness of natural adjustment by which large consequences follow from slight changes apparently remote therefrom, make it in this field peculiarly important to be very watchful of the trends of all progressive or cumulative changes, to learn all that can be learned about the factors, both natural and artificial, that cause them and determine their limits, and to be very cautious and careful about any decisions which, in the light of available knowledge, seem at all likely to affect these trends.

To be cautious, while it debars precipitate and ill-considered action, does not necessarily favor inaction. The most extreme advocate of a policy of non-interference would hardly want to let nature take its course in case of a fire that threatened to devastate the Reserve; nor would he first stop to determine just how far the causes of the fire were "natural" and how far "artificial", nor to argue that if the fire were allowed to take its temporarily destructive course the natural processes of vegetational succession would be almost certain without artificial interference to re-evolve in the course of years whatever vegetation is truly natural to the area. He would rightly, without hesitation or doubt, try to control the fire by artificial means; because of overwhelming evidence that in such a case the predominantly natural conditions of the vegetation which give value to the Reserve would be more endangered by non-interference than by interfering promptly and boldly.

So, but less certainly and after more deliberate consideration, in the case of using artificial means of control to combat a potentially devastating plant disease, the threat of which to the natural values of the Reserve is due, like that of a fire, to a combination of "natural"

and "artificial" factors. Less certainly and more deliberately, because the threatened damage is less imminent and swift and because the available means of combatting it are dangerous two-edged tools, which, if employed injudiciously, might damage the "naturalness" and inspirational value of the vegetation of the Reserve even more than the disease.

Both these cases would involve artificially "assisting" natural processes to take that one of alternative possible courses which seems, in the light of all the knowledge we can bring to bear upon it, clearly and decidedly preferable as a means to safeguarding and perpetuating the qualities of the predominantly natural vegetation on which the value of the Reserve largely depends.

The critical consideration is not the fact of artificial interference, nor the kind of artificial operation involved, but the probable effect thereof and the risk of unforeseen evil effects. There is the strongest presumption against certain kinds of operations as such; as against the introduction of any kind of plant or animal not native to the Reserve. But even to that general rule it might conceivably be wise to make an exception if, for example a destructive exotic parasite were to invade the Reserve and the only means of preventing calamitous devastation by it were found to be the introduction of some equally exotic enemy thereof — a very dangerous kind of remedy, but sometimes less dangerous than the disease.

Again, there is a very strong presumption against trying to "assist nature" by the selective artificial removal of certain plants or the artificial planting of others however unimpeachably native. Yet to that general rule, also, exceptions may be required lest its rigid application defeat its real purpose of safeguarding the values which nature has conferred on the Reserve.

If, contrary to present indications, it should become clearly apparent that the cypresses of the Reserve were in danger of rapid extinction, because of insufficient reproduction under that combination of mainly natural but partly artificial factors by which their reproductive processes are now conditioned, then their reproduction should, we believe, be helped by cautious and well-considered artificial aid. It might be found that the only necessary aid would be to go even further than has already been done in deliberately eliminating or reducing adverse artificial factors active in recent years, such as the careless or deliberate destruction of young seedlings by people, and/or increasing some of the favorable artificial factors active in recent years, such as disturbances of the surface soil akin to those which enabled strong young cypresses to spring up in certain old wheel ruts in an area otherwise

barren of reproduction. But it is conceivable, even if at present improbable, that artificial propagation and planting might become necessary. Persistent failure of the old trees to produce viable seeds (perhaps from wholly "natural" causes or perhaps in part because of some subtle and unrecognizable effect of past human action) might leave the artificial rooting of cuttings and the artificial planting thereof as the only practicable alternative to the final disappearance of cypresses from Cypress Point. In that case such planting, done with extraordinary care to approximate the results of "natural" reproduction notwithstanding the possible reproach of nature-faking, would surely be the lesser of two evils. For the prime justifying purpose of the whole undertaking is to perpetuate the opportunity for people to obtain certain rare and precious inspirational values largely dependent on the cypresses.

In the last analysis there is an irreconcilable conflict between such a purpose and another kind of purpose which might have been, but in fact was not, the controlling justification for creating the Reserve, namely to permit objective scientific observation of some of the processes involved in what appears to be an example of the gradual approach to extinction of a species in natural habitat by

natural causes (even though regretably complicated and in various ways and in unknown degrees accelerated and retarded by human interferences which have been actively carried on here for several generations in the past).

A different sort of question, and one less hypothetical, arises in regard to planting on the knoll east of Carmel Cove, formerly occupied in part by the Japanese village. There is very strong evidence, from stumps and otherwise, that this was formerly and naturally a pine-clad knoll, and will in time again become so if left to nature and not out of reach of seed-trees. It is a well-founded opinion that the pictorially inspiring qualities of this part of the Reserve will be greatly enhanced when this artificially denuded knoll again becomes crowned with pine woods. Further, it is clear that because of relatively recent and very drastic artificial operations such as tree-cutting, cultivation, etc., on the knoll and over a large adjoining area within and without the Reserve, such serious unnatural obstacles have been placed in the way of regeneration of the forest here by ordinary natural processes that a great many years are likely to elapse before those processes can make much progress unless these continuing artificial obstacles are to some extent neutralized by equally

artificial means. An effective supply of wind-borne pine seed having been artificially eliminated and decisive artificial assistance having been given to herbaceous plants in their competition with such pine seeds as may chance to get here and to germinate, it seems entirely justifiable to resort here to artificial planting; provided it is so done that the evidence of this artificial operation will not perpetuate itself in the pattern of the resulting woodland as a durably distracting reminder of man's habitual self-assertion in dealing with the rest of nature.

Trees planted in neat rectangular rows like an agricultural crop would obviously introduce a durable element of artificiality more adverse to the natural values of the Reserve in the long run than many years' delay in the regeneration of the forest; but evidences of artificiality far ^{gross} less than this, and very difficult to avoid, would do the same.

"Assisting nature" is without any question a difficult and dangerous undertaking where every arresting evidence of human self-assertiveness tends to diminish the most important values. For there are thousands of ways in which well-meant attempts at "assisting" ~~or even "improving"~~ nature" would damage the value of the Reserve through unanticipated consequences, for one way in which such attempts would really do more good than harm; whereas there are few

few cases in which deliberate refusal to interfere would involve more than minor or temporary losses of value.

Moreover, one of the admitted motives for planting pines on this knoll is an opinion that a pine-wood is esthetically desirable there. Esthetic preferences are highly subjective and often conflicting as between different individuals; and even more are opinions in advance of the fact as to what will produce esthetically satisfying results peculiarly fallible, the strength with which such opinions appeal to those who hold them having little relation to their reliability. They are, therefore, an extremely dangerous class of motives to admit as grounds for any deliberate artificial manipulation of the vegetation or other features of the Reserve. Yet if we are right in holding (as in the second division of Section 6 above) that the value of the Reserve depends on its sensual beauty no less essentially than on its intellectual significance, it would be not cautiousness but blind timidity to refuse consideration in absolutely every case to esthetic opinions as legitimate grounds for artificial control of the vegetation or other natural features.

True caution requires rather a standing rule that no artificial manipulation affecting the organic life of the Reserve shall ever be undertaken because of esthetic

or other personal preferences except only in cases as to which it shall have been determined, after careful deliberation in the light of all the knowledge that can be brought to bear from many points of view, (1) that protection of the great natural values of the Reservation really requires such deliberate interference with the "course of nature" operating as it must on conditions otherwise modified by man, and (2) that the precise manner in which that interference is to be conducted is adequately safeguarded, with a frank and humble recognition that there are thousands of plausible remedies which are liable to prove worse than the disease for one that is effective and safe.

In spite of a good deal of artificial hindrance and little, if any, artificial help, the stable natural factors, climatic, geologic and biotic, which ultimately determine what vegetation and animal life can survive anywhere, have made this Reserve in its present condition a thing of immense inspirational value to mankind; and except where in some particular their continued operation, with or without some unescapable artificial factors, is found to be unmistakably injurious to that value, it is far safer to trust to these stable natural factors for its maintenance and development than to erratic and far from omniscient human judgments.