CHAPTER 2

John Muir on the Preservation of the Wild Forests of the West

At the same time that Fernow and Pinchot were helping to promote the need for more efficient forest management to serve economic goals and were putting their forest conservation ideas to work in the federal resource bureaucracy, John Muir was roaming the forested wildernesses of the eastern and western United States in search of the deeper meaning of wild nature. Born in Scotland in 1838, Muir's family moved to Wisconsin in 1849 for religious reasons and also to carve out a pioneer farm. Muir worked on the family farm until, at the age of twenty-two in 1860, his mechanical inventions attracted attention at the state agricultural fair in Madison and he was invited to enroll in the state university. After studying science and the humanities for several years, and hiking through neighboring states and Canada with friends, he left the university and eventually worked successfully in several machine shops. An accident in one of them caused him to temporarily lose sight in one eye, and this shocked him into realizing that he should give up his manufacturing work and devote himself to the works of nature. So in 1867 he hiked by himself to Florida and the Gulf of Mexico, and in the following year took a boat to California to explore the western wilderness. Arriving in San Francisco, he saw nothing but ugliness on Market Street, took the ferry to Oakland, and set out on foot for the Sierra mountains, eventually ending up in Yosemite Valley. Working as a sawyer and guide for several years, he did much hiking, exploring, and guiding in the region and, in the early 1870s, began to write about the mountains and wild areas of California and to publish his observations about nature in various popular magazines. He also became alarmed about destructive use of the forests by shepherders and lumbermen, and resolved to do something about it.

In time Muir wandered through many other areas of the western United States, including Utah, Nevada, the Pacific Northwest, the Puget Sound area, and Alaska, exclaiming in his writings, in poetically descriptive language, about the natural beauty that he discovered in the woods and mountains. In 1880 he settled down in Martinez, California, got married, and turned
some of his energies to orchard farming for his father-in-law and to various conservation battles of the day. He fought for the preservation of the Yosemite Valley and Yosemite Park, the Mariposa Big Tree Grove, and King’s Canyon and Sequoia National Parks in California. He became one of the founders of the Sierra Club in 1892 and published his first book, *The Mountains of California*, in 1894. This book was an immediate national success and helped to rally conservation sentiment behind the creation of new national forest reserves. It was at this time that he also wrote the article “The American Forests,” in which he expresses his more public views about the wonders and also the human depredations of the western forests. One of his last conservation battles centered on the proposal to dam a large valley in the Yosemite National Park, the Hetch Hetchy Valley, to supply water for the city of San Francisco. Muir vigorously opposed this plan and spent a good deal of personal energy rallying public support for his position. Though Congress eventually decided to favor the project in 1913, much to his disgust, and Muir died shortly thereafter in 1914, his efforts did lead to compensating legislation in the creation of the National Park Service in 1916.

Muir was not completely opposed to some of the uses of forests that Pinchot advocated, but he did have a parting of the ways with Pinchot over grazing in the national forests and also the damming of Hetch Hetchy, and he was associated most closely with a wilderness philosophy or “theology” that favored the preservation and protection of forests for noneconomic and noncommercial purposes. Muir was concerned about maintaining most of the American forests in a wild state because he located somewhat different values in wild nature than Ferris and Pinchot. He focused his energies on understanding the spiritual meaning of wilderness, characterizing the western forests as “cathedrals” erected by God not only for human use but also for use by animal and plant “kinfolk.” He had a special gift for describing the aesthetic qualities of forested landscapes, and for expressing his delight in the many beauties of wild nature in all of its shapes and forms. To him, it was as if a supreme artist had painted the forests of the West in perfect condition, no matter how they appeared to the naïve eye, and the role of humans was to appreciate them for what they were in themselves. He was also interested in the value of forests for renewing and rejuvenating our souls and providing physical challenges for the weary denizens of cities.

The following reading, excerpted from Muir’s essay “The American Forests,” is less a poetic than a polemical piece and gives a good introduction to Muir’s views about why the wild forests of the country needed the immediate attention of the federal government. The essay was originally published in the *Atlantic Monthly* in 1897, before Muir had a falling out with Pinchot over


grazing in the national forest reserves; it was then republished in his book, Our National Parks, in 1901. In it he urges Uncle Sam to do what God apparently could not do, namely, save the western forests from the “fools” that were exploiting them. In hindsight, it is interesting to see that he had so much confidence in the federal government to manage forests for uses other than timber production. But more vigorous federal management was one of the only real conservation alternatives of the day, for “progressive conservation” of forests was clearly not noticeable in the actions and ideas of timber and resource extraction businessmen, rural entrepreneurs, or local and state politicians in the West. Consequently, Muir had to ally himself with various scientists, urban citizens, eastern politicians, and citizen environmentalists to promote the goal of forest protection and preservation.3

3. An interesting and influential interpretation of the progressive conservation movement can be found in Samuel P. Hays, Conservation and the Gospel of Efficiency: The Progressive Conservation Movement 1890–1920 (Cambridge, Mass.: Harvard University Press, 1959). Hays argues that it was not only large corporations and a corporate land monopoly that exploited the land in the nineteenth century, as the progressive conservationists argued, but Americans in all walks of life, including small farmers. Some large corporations actually supported conservation measures, once they were proposed, while many smaller operators opposed them. Hays asserts that this movement was part of an effort to transform U.S. society from a “decentralized, nontechnical, loosely organized society, where waste and inefficiency run rampant into a highly organized, technical, and centrally planned and directed social organization which could meet a complex world with efficiency and purpose.” This effort was led by President Theodore Roosevelt, implemented by many key professional scientists and scientific bureaucrats such as Pinchot, and supported by the American urban middle-class.
The American Forests

The forests of America, however slighted by man, must have been a great delight to God; for they were the best he ever planted. The whole continent was a garden, and from the beginning it seemed to be favored above all the other wild parks and gardens of the globe. To prepare the ground, it was rolled and sifted in seas with infinite loving deliberation and forethought, lifted into the light, submerged and warmed over and over again, Pressed and crumpled into folds and ridges, mountains, and hills, subsoiled with heaving volcanic fires, ploughed and ground and sculptured into scenery and soil with glaciers and rivers,—every feature growing and changing from beauty to beauty, higher and higher. And in the fullness of time it was planted in groves, and belts, and broad, exuberant, mantling forests, with the largest, most varied, most fruitful, and most beautiful trees in the world. Bright seas made its border, with wave embroidery and icebergs; gray deserts were outspread in the middle of it, mossy tundras on the north, savannas on the south, and blooming prairies and plains; while lakes and rivers shone through all the vast forests and openings, and happy birds and beasts gave delightful animation. Everywhere, everywhere over all the blessed continent, there were beauty and melody and kindly, wholesome, foodful abundance.

These forests were composed of about five hundred species of trees, all of them in some way useful to man, ranging in size from twenty-five feet in height and less than one foot in diameter at the ground to four hundred feet in height and more than twenty feet in diameter,—lordingy monarchs proclaiming the gospel of beauty like apostles. For many a century after the ice-ploughs were melted, nature fed them and dressed them every day,—working like a man, a loving, devoted, painstaking gardener; fingering every leaf and flower and mossy furrowed bole; bending, trimming, modeling, balancing; painting them with the loveliest colors; bringing over them now clouds with cooling shadows and showers, now sunshine; fanning them with gentle winds and rustling their leaves; exercising them in every fibre with storms, and pruning them; loading them with flowers and fruit, loading them with snow, and ever making them more beautiful as the

years rolled by. Wide-branching oak and elm in endless variety, walnut and maple, chestnut and beech, ilex and locust, touching limb to limb, spread a leafy translucent canopy along the coast of the Atlantic over the wrinkled folds and ridges of the Alleghanies,—a green billowy sea in summer, golden and purple in autumn, pearly gray like a steadfast frozen mist of interlacing branches and sprays in leafless, restless winter.

To the southward stretched dark, level-topped cypress in knobby, tangled swamps, grassy savannas in the midst of them like lakes of light, groves of gay, sparkling spicetrees, magnolias and palms, glossy-leaved and blooming and shining continually. To the northward, over Maine and Ottawa, rose hosts of spiry, rosiny evergreens,—white pine and spruce, hemlock and cedar, shoulder to shoulder, laden with purple cones, their myriad needles sparkling and shimmering, covering hills and swamps, rocky headlands and domes, ever bravely aspiring and seeking the sky; the ground in their shade now snow-clad and frozen, now mossy and flowery; beaver meadows here and there, full of lilies and grass; lakes gleaming like eyes, and a silvery embroidery of rivers and creeks watering and brightening all the vast glad wilderness.

Thence westward were oak and elm, hickory and tupelo, gum and liriodendron, sassafras and ash, linden and laurel, spreading on ever wider in glorious exuberance over the great fertile basin of the Mississippi, over damp level bottoms, low dimpling hollows, and round dotting hills, embosoming sunny prairies and cheery park openings, half sunshine, half shade; while a dark wilderness of pines covered the region around the Great Lakes. Thence still westward swept the forests to the right and left around grassy plains and deserts a thousand miles wide: irrepressible hosts of spruce and pine, aspen and willow, nut-pine and juniper, cactus and yucca, carrying nothing for drought, extending undaunted from mountain to mountain, over mesa and desert, to join the darkening multitudes along the coast of the moist and balmy Pacific, where new species of pine, giant cedars and spruces, silver firs and Sequoias, kings of their race, growing close together like grass in a meadow, poised their brave domes and spires in the sky, three hundred feet above the ferns and the lilies that enameled the ground; towering serene through the long centuries, preaching God's forestry fresh from heaven.

Here the forests reached their highest development. Hence they went wavering northward over icy Alaska, brave spruce and fir, poplar and birch, by the coasts and the rivers, to within sight of the Arctic Ocean. American forests! the glory of the world! Surveyed thus from the east to the west, from the north to the south, they are rich beyond thought, immortal, immeasurable, enough and to spare for every feeding, sheltering beast and bird, insect and son of Adam; and nobody need have cared had there been no pines in Norway, no cedars and deodars on Lebanon and the Himalayas, no vine-clad selvas in the basin of the Amazon. With such variety, harmony, and triumphant exuberance, even nature, it would seem, might have rested content with the forests of North America, and planted no more.

So they appeared a few centuries ago when they were rejoicing in wilderness. The Indians with stone axes could do them no more harm than could gnawing beavers and browsing moose. Even the fires of the Indians and the fierce shattering lightning seemed to work together only for good in clearing spots here and there for smooth garden prairies, and openings for sunflowers seeking the light. But when the steel axe of the white man rang out
on the startled air their doom was sealed. Every
tree heard the bodeful sound, and pillars of
smoke gave the sign in the sky.
I suppose we need not go mourning the
buffaloes. In the nature of things they had to
give place to better cattle, though the change
might have been made without barbarous
wickedness. Likewise many of nature’s five
hundred kinds of wild trees had to make way
for orchards and cornfields. In the settlement
and civilzation of the country, bread more
than timber or beauty was wanted; and in the
blindness of hunger, the early settlers, claiming
Heaven as their guide, regarded God’s trees
as only a larger kind of pernicious weeds,
extremely hard to get rid of. Accordingly, with
no eye to the future, these pious destroyers
wagged interminable forest wars; chips flew
thick and fast; trees in their beauty fell crashing
by millions, smashed to confusion, and the
smoke of their burning has been rising to
heaven more than two hundred years. After the
Atlantic coast from Maine to Georgia had been
mostly cleared and scorched into melancholy
ruins, the overflowing multitude of bread and
money seekers poured over the Alleghanies
into the fertile middle West, spreading ruthless
devastation ever wider and farther over the rich
valley of the Mississippi and the vast shadowy
pine region about the Great Lakes. Thence
still westward, the invading horde of destroyers
called settlers made its fiery way over the broad
Rocky Mountains, felling and burning more
fiercely than ever, until at last it has reached
the wild side of the continent, and entered the
last of the great aboriginal forests on the shores
of the Pacific.
Surely, then, it should not be wondered
at that lovers of their country, bewailing its
baldness, are now crying aloud, “Save what is
left of the forests!” Clearing has surely now
gone far enough; soon timber will be scarce,
and not a grove will be left to rest in or pray
in. The remnant protected will yield plenty of
timber, a perennial harvest for every right use,
without further diminution of its area, and will
continue to cover the springs of the rivers that
rise in the mountains and give irrigating waters
to the dry valleys at their feet, prevent wasting
floods and be a blessing to everybody forever.
Every other civilized nation in the world has
been compelled to care for its forests, and so
must we if waste and destruction are not to go
on to the bitter end, leaving America as barren
as Palestine or Spain. In its calmer moments, in
the midst of bewildering hunger and war and
restless over-industry, Prussia has learned that
the forest plays an important part in human
progress, and that the advance in civilization
only makes it more indispensable. It has,
therefore, as shown by Mr. Pinchot, refused
to deliver its forests to more or less speedy
destruction by permitting them to pass into
private ownership. But the state woodlands are
not allowed to lie idle. On the contrary, they are
made to produce as much timber as is possible
without spoiling them. In the administration of
its forests, the state righteousely considers itself
bound to treat them as a trust for the nation as
a whole, and to keep in view the common good
of the people for all time.

It seems, therefore, that almost every civilized
nation can give us a lesson on the management
and care of forests. So far our government has
done nothing effective with its forests, though
the best in the world, but is like a rich and
foolish spendthrift who has inherited a magni-
cificent estate in perfect order, and then has left
his fields and meadows, forests and parks, to be
sold and plundered and wasted at will, depend-
ing on their inexhaustible abundance. Now it
is plain that the forests are not inexhaustible,
and that quick measures must be taken if ruin
is to be avoided. Year by year the remnant is
growing smaller before the axe and fire, while the laws in existence provide neither for the protection of the timber from destruction nor for its use where it is most needed.

As is shown by Mr. E. A. Bowers, formerly Inspector of the Public Land Service, the foundation of our protective policy, which has never protected, is an act passed March 1, 1817, which authorized the Secretary of the Navy to reserve lands producing live-oak and cedar, for the sole purpose of supplying timber for the navy of the United States. An extension of this law by the passage of the act of March 2, 1831, provided that if any person should cut live-oak or red cedar trees or other timber from the lands of the United States for any other purpose than the construction of the navy, such person should pay a fine not less than triple the value of the timber cut, and be imprisoned for a period not exceeding twelve months. Upon this old law, as Mr. Bowers points out, having the construction of a wooden navy in view, the United States government has to-day chiefly to rely in protecting its timber throughout the arid regions of the West, where none of the naval timber which the law had in mind is to be found.

By the act of June 3, 1878, timber can be taken from public lands not subject to entry under any existing laws except for minerals, by bona fide residents of the Rocky Mountain states and territories and the Dakotas. Under the timber and stone act, of the same date, land in the Pacific States and Nevada, valuable mainly for timber, and unfit for cultivation if the timber is removed, can be purchased for two dollars and a half an acre, under certain restrictions. By the act of March 3, 1875, all land-grant and right-of-way railroads are authorized to take timber from the public lands adjacent to their lines for construction purposes; and they have taken it with a vengeance, destroying a hundred times more than they have used, mostly by allowing fires to run in the woods. The settlement laws, under which a settler may enter lands valuable for timber as well as for agriculture, furnish another means of obtaining title to public timber.

With the exception of the timber culture act, under which, in consideration of planting a few acres of seedlings, settlers on the treeless plains got 160 acres each, the above is the only legislation aiming to protect and promote the planting of forests. In no other way than under some one of these laws can a citizen of the United States make any use of the public forests. To show the results of the timber-planting act, it need only be stated that of the thirty-eight million acres entered under it, less than one million acres have been patented. This means that less than fifty thousand acres have been planted with stunted, woebegone, almost hopeless sprouts of trees, while at the same time the government has allowed millions of acres of the grandest forest trees to be stolen or destroyed, or sold for nothing. Under the act of June 3, 1878, settlers in Colorado and the Territories were allowed to cut timber for mining and educational purposes from mineral land, which in the practical West means both cutting and burning anywhere and everywhere, for any purpose, on any sort of public land. Thus, the prospector, the miner, and mining and railroad companies are allowed by law to take all the timber they like for their mines and roads, and the forbidden settler, if there are no mineral lands near his farm or stock-ranch, or none that he knows of, can hardly be expected to forbear taking what he needs wherever he can find it. Timber is as necessary as bread, and no scheme of management failing to recognize and properly provide for this want can possibly be maintained. In any case, it will be hard to teach the pioneers that it is wrong to steal government timber. Taking from the government is with them the same as taking from nature,
and their consciences flinch no more in cutting timber from the wild forests than in drawing water from a lake or river. As for reservation and protection of forests, it seems as silly and needless to them as protection and reservation of the ocean would be, both appearing to be boundless and inexhaustible.

The special land agents employed by the General Land Office to protect the public domain from timber depredations are supposed to collect testimony to sustain prosecution and to superintend such prosecution on behalf of the government, which is represented by the district attorneys. But timber thieves of the Western class are seldom convicted, for the good reason that most of the jurors who try such cases are themselves as guilty as those on trial. The effect of the present confused, discriminating, and unjust system has been to place almost the whole population in opposition to the government; and as conclusive of its futility as shown by Mr. Bowers, we need only state that during the seven years from 1881 to 1887 inclusive, the value of the timber reported stolen from the government lands was $36,719,935, and the amount recovered was $478,073, while the cost of the services of special agents alone was $435,000, to which must be added the expense of the trials. Thus for nearly thirty-seven million dollars' worth of timber the government got less than nothing; and the value of that consumed by running fires during the same period, without benefit even to thieves, was probably over two hundred millions of dollars. Land commissioners and Secretaries of the Interior have repeatedly called attention to this ruinous state of affairs, and asked Congress to enact the requisite legislation for reasonable reform. But, busied with tariffs, etc., Congress has given no heed to these or other appeals, and our forests, the most valuable and the most destructible of all the natural resources of the country, are being robbed and burned more rapidly than ever. The annual appropriation for so-called "protection service" is hardly sufficient to keep twenty-five timber agents in the field, and as far as any efficient protection of timber is concerned these agents themselves might as well be timber.¹

That a change from robbery and ruin to a permanent rational policy is urgently needed nobody with the slightest knowledge of American forests will deny. In the East and along the northern Pacific coast, where the rainfall is abundant, comparatively few care keenly what becomes of the trees so long as fuel and lumber are not noticeably dear. But in the Rocky Mountains and California and Arizona, where the forests are inflammable, and where the fertility of the lowlands depends upon irrigation, public opinion is growing stronger every year in favor of permanent protection by the federal government of all the forests that cover the sources of the streams. Even lumbermen in these regions, long accustomed to steal, are now willing and anxious to buy lumber for their mills under cover of law: some possibly from a late second growth of honesty, but most, especially the small mill-owners, simply because it no longer pays to steal where all may not only steal, but also destroy, and in particular because it costs about as much to steal timber for one mill as for ten, and, therefore, the ordinary lumberman can no longer compete with the large corporations. Many of the miners find that timber is already becoming scarce and dear on the denuded hills around their mills, and they, too, are asking for protection of forests, at least against fire. The slow-going, unthrifty farmers, also, are beginning to realize that when the timber is stripped from the mountains the irrigating streams dry up in summer, and are destructive in winter; that soil, scenery, and everything slips off with the trees: so of course they are coming into the ranks of tree-friends.
Of all the magnificent coniferous forests around the Great Lakes, once the property of the United States, scarcely any belong to it now. They have disappeared in lumber and smoke, mostly smoke, and the government got not one cent for them; only the land they were growing on was considered valuable, and two and a half dollars an acre was charged for it. Here and there in the Southern States there are still considerable areas of timbered government land, but these are comparatively unimportant. Only the forests of the West are significant in size and value, and these, although still great, are rapidly vanishing. Last summer, of the unrivaled redwood forests of the Pacific Coast Range, the United States Forestry Commission could not find a single quarter-section that remained in the hands of the government.2

The redwood is the glory of the Coast Range. It extends along the western slope, in a nearly continuous belt about ten miles wide, from beyond the Oregon boundary to the south of Santa Cruz, a distance of nearly four hundred miles, and in massive, sustained grandeur and closeness of growth surpasses all the other timber woods of the world. Trees from ten to fifteen feet in diameter and three hundred feet high are not uncommon, and a few attain a height of three hundred and fifty feet or even four hundred, with a diameter at the base of fifteen to twenty feet or more, while the ground beneath them is a garden of fresh, exuberant ferns, lilies, gaultheria, and rhododendron. This grand tree, Sequoia sempervirens, is surpassed in size only by its near relative Sequoia gigantea, or Big Tree, of the Sierra Nevada, if, indeed, it is surpassed. The sempervirens is certainly the taller of the two. The gigantea attains a greater girth, and is heavier, more noble in port, and more sublimely beautiful.

These two Sequoias are all that are known to exist in the world, though in former geological times the genus was common and had many species. The redwood is restricted to the Coast Range, and the Big Tree to the Sierra.

As timber the redwood is too good to live. The largest sawmills ever built are busy along its seaward border, "with all the modern improvements," but so immense is the yield per acre it will be long ere the supply is exhausted. The Big Tree is also, to some extent, being made into lumber. It is far less abundant than the redwood, and is, fortunately, less accessible, extending along the western flank of the Sierra in a partially interrupted belt, about two hundred and fifty miles long, at a height of from four to eight thousand feet above the sea. The enormous logs, too heavy to handle, are blasted into manageable dimensions with gunpowder.

A large portion of the best timber is thus shattered and destroyed, and, with the huge, knotty tops, is left in ruins for tremendous fires that kill every tree within their range, great and small. Still, the species is not in danger of extinction. It has been planted and is flourishing over a great part of Europe, and magnificent sections of the aboriginal forests have been reserved as national and State parks,—the Mariposa Sequoia Grove, near Yosemite, managed by the State of California, and the General Grant and Sequoia national parks on the Kings, Kaweah, and Tule Rivers, efficiently guarded by a small troop of United States cavalry under the direction of the Secretary of the Interior. But there is not a single specimen of the redwood in any national park. Only by gift or purchase, so far as I know, can the government get back into its possession a single acre of this wonderful forest.

The legitimate demands on the forests that have passed into private ownership, as well as those in the hands of the government, are increasing every year with the rapid settlement
and up-building of the country, but the methods of lumbering are as yet grossly wasteful. In most mills only the best portions of the best trees are used, while the ruins are left on the ground to feed great fires, which kill much of what is left of the less desirable timber, together with the seedlings, on which the permanence of the forest depends. Thus every mill is a centre of destruction far more severe from waste and fire than from use. The same thing is true of the mines, which consume and destroy indirectly immense quantities of timber with their innumerable fires, accidental or set to make open ways, and often without regard to how far they run. The prospector deliberately sets fires to clear off the woods just where they are densest, to lay the rocks bare and make the discovery of mines easier. Sheep-owners and their shepherds also set fires everywhere through the woods in the fall to facilitate the march of their countless flocks the next summer, and perhaps in some places to improve the pasturage. The axe is not yet at the root of every tree, but the sheep is, or was before the national parks were established and guarded by the military, the only effective and reliable arm of the government free from the blight of politics. Not only do the shepherds, at the driest time of the year, set fire to everything that will burn, but the sheep consume every green leaf, not sparing even the young conifers, when they are in a starving condition from crowding, and they rake and dibble the loose soil of the mountain sides for the spring floods to wash away, and thus at last leave the ground barren.

It is not generally known that, notwithstanding the immense quantities of timber cut every year for foreign and home markets and mines, from five to ten times as much is destroyed as is used, chiefly by running forest fires that only the federal government can stop. Travelers through the West in summer are not likely to forget the firework displayed along the various railway tracks. Thoreau, when contemplating the destruction of the forests on the east side of the continent, said that soon the country would be so bald that every man would have to grow whiskers to hide its nakedness, but he thanked God that at least the sky was safe. Had he gone West he would have found out that the sky was not safe; for all through the summer months, over most of the mountain regions, the smoke of mill and forest fires is so thick and black that no sunbeam can pierce it. The whole sky, with clouds, sun, moon, and stars, is simply blotted out. There is no real sky and no scenery. Not a mountain is left in the landscape. At least none is in sight from the lowlands, and they all might as well be on the moon, as far as scenery is concerned.

Notwithstanding all the waste and use which have been going on unchecked like a storm for more than two centuries, it is not yet too late—though it is high time—for the government to begin a rational administration of its forests. About seventy million acres it still owns,—enough for all the country, if wisely used. These residual forests are generally on mountain slopes, just where they are doing the most good, and where their removal would be followed by the greatest number of evils; the lands they cover are too rocky and high for agriculture, and can never be made as valuable for any other crop as for the present crop of trees. It has been shown over and over again that if these mountains were to be stripped of their trees and underbrush, and kept bare and sodless by hordes of sheep and the innumerable fires the shepherds set, besides those of the millmen, prospectors, shake-makers, and all sorts of adventurers, both lowlands and mountains would speedily become little better than deserts, compared with their present beneficent fertility. During heavy rainfalls and
while the winter accumulations of snow were melting, the larger streams would swell into destructive torrents, cutting deep, rugged-edged gullies, carrying away the fertile humus and soil as well as sand and rocks, filling up and overflowing their lower channels, and covering the lowland fields with raw detritus. Drought and barrenness would follow.

In their natural condition, or under wise management, keeping out destructive sheep, preventing fires, selecting the trees that should be cut for lumber, and preserving the young ones and the shrubs and sod of herbaceous vegetation, these forests would be a never failing fountain of wealth and beauty. The cool shades of the forest give rise to moist beds and currents of air, and the sod of grasses and the various flowering plants and shrubs thus fostered, together with the network and sponge of tree roots, absorb and hold back the rain and the waters from melting snow, compelling them to ooze and percolate and flow gently through the soil in streams that never dry. All the pine needles and roullets and blades of grass, and the fallen, decaying trunks of trees, are dams, storing the bounty of the clouds and dispensing it in perennial life-giving streams, instead of allowing it to gather suddenly and rush headlong in short-lived devastating floods. Everybody on the dry side of the continent is beginning to find this out, and, in view of the waste going on, is growing more and more anxious for government protection. The outrages we hear against forest reservations come mostly from thieves who are wealthy and steal timber by wholesale. They have so long been allowed to steal and destroy in peace that any impediment to forest robbery is denounced as a cruel and irreligious interference with "vested rights," likely to endanger the repose of all ungodly welfare.

Even in Congress a sizable chunk of gold, carefully concealed, will outtalk and outfight all the nation on a subject like forestry, well smothered in ignorance, and in which the money interests of only a few are conspicuously involved. Under these circumstances, the bawling, blethering oratorical stuff drowns the voice of God himself. Yet the dawn of a new day in forestry is breaking. Honest citizens see that only the rights of the government are being trampled, not those of the settlers. Only what belongs to all alike is reserved, and every acre that is left should be held together under the federal government as a basis for a general policy of administration for the public good. The people will not always be deceived by selfish opposition, whether from timber and mining corporations or from sheepmen and prospectors, however cunningly brought forward underneath fables and gold.

Emerson says that things refuse to be mismanaged long. An exception would seem to be found in the case of our forests, which have been mismanaged rather long, and now come desperately near being like smashed eggs and spilt milk. Still, in the long run the world does not move backward. The wonderful advance made in the last few years, in creating four national parks in the West, and thirty forest reservations, embracing nearly forty million acres; and in the planting of the borders of streets and highways and spacious parks in all the great cities, to satisfy the natural taste and hunger for landscape beauty and righteousness that God has put, in some measure, into every human being and animal, shows the trend of awakening public opinion. The making of the far-famed New York Central Park was opposed by even good men, with misguided pluck, perseverance, and ingenuity; but straight right won its way, and now that park is appreciated. So we confidently believe it will be with our great national parks and forest reservations. There will be a period of indifference on the

Gold, gold, gold! How strong a voice that metal has!

"O wae for the siller, it is sae preva'lin!"
part of the rich, sleepy with wealth, and of the
toiling millions, sleepy with poverty, most of
whom never saw a forest; a period of screaming
protest and objection from the plunderers, who
are as unconscionable and enterprising as Sa-
tan. But light is surely coming, and the friends
of destruction will preach and bewail in vain.

The United States government has always
been proud of the welcome it has extended
to good men of every nation, seeking freedom
and homes and bread. Let them be welcomed
still as nature welcomes them, to the woods
as well as to the prairies and plains. No place
is too good for good men, and still there is
room. They are invited to heaven, and may
well be allowed in America. Every place is
made better by them. Let them be as free to
pick gold and gems from the hills, to cut and
hew, dig and plant, for homes and bread, as
the birds are to pick berries from the wild
bushes, and moss and leaves for nests. The
ground will be glad to feed them, and the pines
will come down from the mountains for their
homes as willingly as the cedars came from
Lebanon for Solomon’s temple. Nor will the
woods be the worse for this use, or their benign
influences be diminished any more than the
sun is diminished by shining. Mere destroyers,
however, tree-killers, wool and mutton men,
spreading death and confusion in the fairest
groves and gardens every planted,—let the
government hasten to cast them out and make
an end of them. For it must be told again and
again, and be burningly borne in mind, that
just now, while protective measures are being
deliberated languidly, destruction and use are
speeding on faster and farther every day. The
axe and saw are insanely busy, chips are flying
thick as snowflakes, and every summer thou-
sands of acres of priceless forests, with their
underbrush, soil, springs, climate, scenery, and
religion, are vanishing away in clouds of smoke,
while, except in national parks, not one forest
guard is employed.

All sorts of local laws and regulations have
been tried and found wanting, and the costly
lessons of our own experience, as well as that of
every civilized nation, show conclusively that
the fate of the remnant of our forests is in the
hands of the federal government, and that if
the remnant is to be saved at all, it must be
saved quickly.

Any fool can destroy trees. They cannot run
away; and if they could, they would still be
destroyed,—chased and hunted down as long
as fun or a dollar could be got out of their
bark hides, branching horns, or magnificent
bole backbones. Few that fell trees plant them;
nor would planting avail much towards getting
back anything like the noble primeval forests.
During a man’s life only saplings can be grown,
in the place of the old trees—tens of centuries
old—that have been destroyed. It took more
than three thousand years to make some of the
trees in these Western woods,—trees that are
still standing in perfect strength and beauty,
wavng and singing in the mighty forests of
the Sierra. Through all the wonderful, eventful
centuries since Christ’s time—and long before
that—God has cared for these trees, saved
them from drought, disease, avalanches, and
a thousand straining, leveling tempests and
floods; but he cannot save them from fools,—
only Uncle Sam can do that.

Notes

1. A change for the better, compelled by public
opinion, is now going on,—1901.

2. The State of California recently appropriated
two hundred and fifty thousand dollars to buy a
block of redwood land near Santa Cruz for a state
park. A much larger national park should be made
in Humboldt or Mendocino county.