

Materials in this file as of August 20, 1980 J. P. R. R.

Professional Forestry in the United States Henry Clepper The John Hopkins Press 1971

Fifty Years of Forestry in the U.S.A. Robert K. Winters Society of American Foresters 1950

of American Foresters 1950

The Forest Service Service Monographs of the United States Government No. 58 The Brookings Institution 1930

✓ American Forests V.61 No.4 April, 1955 Henry Graves...the Great Conserver W.B. Greeley

✓ American Forestry V.16 No.2 February, 1910 Henry Solon Graves, Forester U.S. Forest Service

Journal of Forestry V.42 No.9 September 1944 Henry S. Graves Awarded Schlich Forestry Medal

Journal of Forestry V.18 No.3 March, 1920 The Old Order Changes

✓ Journal of Forestry V.49 No.5 May 1951 Henry Solon Graves 1871-1951

The National Cyclopedia of American Biography 1930 (current edition)
Who Was Who in America

Telegram March 15, 1962 - Henry Solon Graves accepted Commission 5 June 17 entered on Active Duty 6 Jun 17 - Honorable Discharge 4 Feb 1918

SERVICE BULLETIN, Washington Office, March 8, 1920, letter of resignation as Chief

SERVICE BULLETIN, July 8, 1940 - honorary degree of LLD bestowed on Graves by Yale University

INFORMATION DIGEST, Washington Office - March 8, 1951 - Col Henry S. Graves, died at Brattleboro, Vt, March 7, 1951, after long illness. ~~Funeral~~ Funeral Services at New Haven, Conn at 2:30 p.m.

SERVICE BULLETIN, 3/9/39 - Dean Graves to retire from Yale faculty

Happy Days, July 14, 1934 "Forest Service Chiefs: - Graves " by Charles E. Randall

See Bro-Photos
Graves, H.S.



Henry S. Graves, a Yale Forest School student, is seen
checking the growth rate of a conifer just cut down at
Gifford Pinchot's estate, Milford, Pa., 1904. Graves was an
early personal and professional associate of Pinchot, and was
head of the Yale Forest School set up at Yale by Pinchot in 1900,
from 1900-1910, when he replaced Pinchot as chief of the
Forest Service.

Henry S. Graves checks growth rate of a conifer just cut down at Yale Forest School
Summer Session on Gifford Pinchot's estate, Milford, Pa., 1904. Graves was an
early personal and professional associate of Pinchot, and was head of the Yale Forest
School set up at Yale by Pinchot in 1900, from 1900-1910, when he replaced Pinchot
as chief of the Forest Service. PHOTO FROM NATIONAL ARCHIVES RG 90-G



See: bio-photos. Graves, H.S.

39,553-A -- (Part of a series of photos taken during an official inspection trip of top Forest Service and Montana state game officials of range and game conditions in the Gallatin Basin of southwestern Montana just north of Yellowstone National Park in the fall of 1917.)
Description on photo sheet submitted to WO, November 1917, reads:
"Col. Graves and party on upper Porcupine Creek. Left to right: Nelson Storey, member, Montana State Game Commission; Forest Supervisor R. E. Bodley; Hans Biering, president, Taylor Fork Cattle Co., Forest Ranger Fickas; Colonel (Henry S.) Graves" (Chief Forester).
(All are on horseback.) Photo taken by Smith Riley. *from right to left.*

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RETEL 3-13. HENRY SOLON GRAVES, DOB 5-3-71, MILITARY LEAVE WITHOUT
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U. S. FOREST SERVICE

MAR 14 1962

WASHINGTON OFFICE
PERSONNEL SECTION

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The honorary degree of L.L.D. was bestowed on Henry Solon Graves by Yale University at commencement exercises on June 19. Presentation was made by Professor William Lyon Phelps, who read the following citation:

"Gifford Pinchot, Yale '89, became 'America's first professional forester.' Three years later Graves took his degree, and instead of entering politics, according to the label of his middle name, he took to the woods; which indeed has been the destination of some politicians. In 1898, Pinchot became chief of the small division of forestry in the United States Agriculture Department and Graves assistant chief. They saw that if the wholesale butchering of the Nation's timber resources was to be curbed two things were necessary: the government must fight it and scientific foresters must be trained in American schools. Dr. Graves left the government in 1900 to found Yale's School of Forestry. Dr. Graves remained at Yale until 1910, when he became chief of the United States Forest Service. He returned to Yale after ten years to be Dean and Sterling Professor of Forestry. His career illustrates exactly the opposite of a familiar proverb--you can't see the forest for the trees. If he had applied his scientific policy of production cutting, that is production through elimination, in the Garden of Eden, he would by the fall of a tree have prevented the fall of man."

Biographical Sketch of ~~Franklin B. Hough~~ Henry Solon Graves

By Jean M. Pablo

Too loosely organized.

Henry Solon Graves (1871-1951) was a pioneer American ^(practicing) forester. He was born in Marietta, Ohio, on May 3, 1871, the son of ^(Prof.) William Blair, a professor of natural science at Phillips Academy in Andover, Massachusetts, and Luranah Graves. He ^(Andover, Mass., where his father taught natural science) attended Phillips Academy, and then ^(in 1888) entered Yale University, where he achieved scholastic success and demonstrated a capacity for leadership. ^(Scholarship) As a freshman, he won the position of quarterback on the school's football team. They became life-long friends and associates. ^{both studying forestry in Europe, working together} From the beginning, Pinchot had a high regard for Graves' ability, courage, and unusual capacity to get along with people. ^{Consulting foresters for large landowners and then as leaders of the young forestry office in the U.S. Department of Agriculture.}

Footnote condensed

Graves taught briefly after earning his B.A. at Yale in 1892, then [?] Gifford Pinchot became America's first native-born professional forester and encouraged Graves to enter the same profession. Graves resigned from teaching and began his studies as Biltmore. He also ^{when? where? when did he start? as a student? what's that? when? Estate? School?} compiled field data on the growth of the white pine which was the most important commercial timber tree of the day. The results were published in 1896 and was the first professional investigation of a North American tree. ^{not true - Spaulding did 1st white pine we have a copy}

^{when? where? no degree? Dr.} Like Pinchot, Graves studied in Europe under Sir Dietrich Brandis, which included several field studies, thus establishing him as one of the best trained American born foresters. ^{? who says? whose? spell out the first time used} Upon his return to the U.S. Pinchot invited him to be his assistant as a consulting forester. In this capacity, Graves conducted studies in the New York State Forest Preserve as well as in the Black Hills with the U.S. Geological Survey, acquiring experience in the basic sciences, mensuration, silviculture, organized management and other technical features of forestry. The results of these studies were published under the titles, "The Black Hills Forest Reserve" and "Practical Forestry in the

To be much better

Andirondacks." Throughout his long career, Graves published many studies embracing a wide range of studies and contributed significantly to the knowledge of American Forestry.]

old USDA
when On July 1, 1898, Gifford Pinchot became Chief of the Division of Forestry, *he made* *principal?* ~~USDA~~ with Henry S. Graves as his Assistant. On October 15, 1898,

Condense the Division *ed technical services* [issued Circular 21] offering [advice] to farmers and lumbermen, and [thus establishing practical and paying forestry on a limited scale.] Graves

was placed in charge of this program. [However, it soon became apparent that *why? how?*

the Division's work was hampered by a lack of men trained in American forests.

In order to *remedy?* this problem. the Pinchot family offered an endowment ~~xxfi~~ fund of \$150,000 for the establishment of the Yale School of

Forestry, to be organized as a separate school with a graduate program.

James Pinchot, also offered facilities on his estate in Milford Pennsylvania

for a summer program. Henry Graves was to be the director of the school.

The establishment of the Yale School of Forestry was a milestone in the development of American Forestry. [The school enjoyed notable success because of the scholastic excellence instilled

in it by Graves.] It *3* [attracted highly qualified] students *this field.* [who later became leaders in [all phases of American forestry.] Graves *hired well qualified instructor* *also* *and wrote*

Condense [authored] some of the first American Forestry textbooks.

[During his tenure as Dean of the Yale School of

Forestry, Graves remained in close touch with Gifford Pinchot

and perhaps shared his anguish arising from the Ballinger *Issue* ~~Issued~~

which resulted in Pinchot's dismissal.] The appointment of Graves

as second Chief of the Forest Service in 1910 at Pinchot's urging

did much to *strengthen the prof'l character of the Forest Service* [ensure that the forest service would continue to be operated

by competent professionals rather than political appointees.]

When Graves accepted the responsibility of Chief of the Forest Service he faced serious morale ^{internal? what problems?} and congressional distrust of the agency. He succeeded in restoring a professional relationship with the Secretary of Agriculture and guided the Service through a period of strict financial accountability. In addition, he managed to continue the investigation of claims from both farmers and miners, and ^{begin the} purchase of lands for National Forests in the East which ^{was authorized by} occurred as a result of the Weeks Law of March 1, 1911. ^{into commercial uses of wood}

New areas of research were ^{also} opened up by ^{when} ~~establishing~~ ^{the} ~~the~~ establishing Forest Products Laboratory ^{was established in}

and new ways were sought for cooperative efforts to fight the devastation of fire ^{at} ^{where implemented under the Weeks Law} Graves was

also responsible for the cooperation of the Forest Service participation in ~~the cooperation of the Forest Service~~ during World War I, ~~the cooperation of the Forest Service~~ ^{where more than 20,000 men were engaged in}

In 1920, Henry S. Graves ^(direct) resigned from the Forest Service and returned to the Yale School of Forestry, where he was made Dean of the School and Sterling Professor of Forestry.

He continued to serve in these offices until 1939, and served ^{During that period he worked} on several important educational committees, working to advance forestry and conservation, ^{collaborating on a noted text on forestry education.}

On August 1, 1944, Henry Solon Graves received the Schlich Forestry Medal for his distinguished service to American Forestry. ~~Henry Graves~~ Henry Graves was a member of many organizations including The Society of American Foresters, and the American Geological Soc. ~~and the receipt of many distinctions~~ and the receipt of many distinctions and honors, including the Gifford Pinchot Medal, 1950.

References:

A Biographical Sketch of Henry Solon Graves (1891-1951)

by

Jean M. Pablo

Henry Solon Graves, a pioneer American forester, was born in Marietta, Ohio. His father was a professor of natural science at Phillips Academy in Andover, Massachusetts, which Graves attended. Later he entered Yale University where he achieved scholastic success and demonstrated a capacity of leadership. Among his first acquaintances at Yale was Gifford Pinchot, a senior, who befriended the young freshman. Pinchot had a high regard for Graves and they became life-long friends and associates. Pinchot encouraged Graves to take up forestry as a career. Graves ^ebecame the second American to study forestry abroad. On his return from Germany, Graves joined Pinchot as a private consulting forester. On July 1, 1898, Gifford Pinchot became Chief of the Division of Forestry, USDA with Henry S. Graves as his assistant. Together they started the actual practice of forestry in the United States.

Both men realized the need for trained foresters, and in 1900 Graves left for New Haven to establish the Yale School of Forestry. Funded by the Pinchot family, the Yale School was unique in that it offered a program on the graduate level, including a summer field school on the Pinchot estate in Milford, Pa. The establishment of the school was a milestone in the development of American Forestry and under the direction of Henry Graves it enjoyed notable success and a reputation for scholastic excellence. In addition to other duties, Graves wrote two of the first American textbooks on forestry: Forest Mensuration (1906); and Principles of Handling Woodlands (1911).

New areas of research into commercial uses of wood were opened up when Graves helped establish the Forest Products Laboratory in Madison, Wisconsin in 1910 and new cooperative efforts to fight the devastation of at state and local levels were implemented under the Weeks Law.

~~XX~~ Graves was responsible for Forest Service participation in World War I, when more than 20,000 men were engaged in war-related lumber activities and he and several of his staff went to France to direct lumbering to supply the troops.

New areas of research into commercial uses of wood were opened up when the Forest Products ~~Laboratories~~ Laboratory was established in 1910

During his tenure as Dean of the Yale School of Forestry, Graves remained in close touch with Gifford Pinchot and shared his anguish over the Ballinger controversy which resulted in Pinchot's dismissal as Chief of the Forest Service. However, Graves' appointment as the second Chief in 1910 at Pinchot's urging ensured that the Forest Service would continue to be led by competent professionals rather than political appointees.

When Graves accepted the job as Chief of the Forest Service, he faced serious morale problems and congressional distrust of the agency. He succeeded in restoring a professional relationship with the Secretary of Agriculture and guided the Service through a period of strict financial accountability. In addition, he managed to continue the investigation of claims from both farmers and miners and began the purchase of lands for the National Forests in the east which was authorized under the Weeks Act of March 1, 1911.

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In 1920, Graves returned to direct the Yale School of Forestry, where he remained Dean until 1939. During that period he worked on several important educational committees to advance standards of forest education and conservation and collaborated on a noted text on forestry education (*Forest Education* in 1932). In 1944, Henry Solon Graves received the Schlich Forestry Medal for his distinguished service to America Forestry. He was a member of

many organizations including the Society of American Foresters, and the American Geological Society and the recipient of many distinctions and honors, including the Gifford Pinchot Medal in 1950.

References:

Henry Clepper, Professional Forestry in the United States (Baltimore: John Hopkins Press, 1971), pp. 124-128.

Obituary, Journal of Forestry, 49:5 (May 1951), p. 325.

S. N. Spring, ed. The First Half-Century of the Yale School of Forestry (New Haven: Yale University School of Forestry, 1950), pp. 3-6.

Harold K. Steen, The U.S. Forest Service: A History (Seattle: University of Washington Press, 1976), pp. 103-144.

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Both men realized the need for trained foresters, and in 1900, Graves left for New Haven to establish the Yale School of Forestry. Funded by the Pinchot family, ~~this school~~ the Yale School was unique in that it offered a program on the graduate level, ^{including a summer field school on the Pinchot estate} ~~as well as a summer program in Milford, Pa.~~ The establishment of the school was a milestone in the development of American Forestry and under the direction of Henry Graves ^{it} ~~the school~~ enjoyed notable success and ^{a reputation for} scholastic excellence. In addition to his other duties, Graves wrote two of the first American textbooks on forestry: Forest Mensuration (1906); and Principles of Handling Woodlands (1911).

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Job 25

When Graves accepted the ~~responsibility~~ of Chief of the Forest Service, he faced serious morale problems and congressional distrust of the agency. He succeeded in restoring a professional relationship with the Secretary of Agriculture and guided the Service through a period of strict financial accountability. In addition, he managed to continue the investigation of claims from both farmers and miners and begin^a the purchase of lands for the National Forests in the east which was authorized ~~by~~^{under} the Weeks ~~Law~~^{Act} of March 1, 1911.

New areas of research ~~were~~ into commercial uses of wood were opened up when ^{Graves helped establish} the Forest Products Laboratory ^{in Madison, Wisc.} ~~was established by Graves~~ in 1910 and new cooperative efforts to fight the devastation of fire at state and local levels ~~was~~ were implemented under the Weeks ^{Act} Law. Graves ~~was responsible~~ ^{guided} ~~the~~ ^{for} Forest Service's participation in World War I, when more than 20,000 men were engaged in war-related lumber activities, and he and several of his staff went to France to direct lumbering to supply the troops.

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References:

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Obituary, Journal of Forestry, 49:5 (May 1951), p. 325.

S.N. Spring, ed. The First Half-Century of the Yale School of Forestry (New Haven: Yale University School of Forestry, 1950), pp. 3-6.

Harold K. Steen, The U.S. Forest Service: A History (Seattle: University of Washington Press, 1976). pp. 103-144.

Revised Version
for Chief R. M. Peterson
Feb. - March 1983

Henry Solon Graves (1871-1951)

Dean of First Graduate School of Forestry (Yale) in the U.S.

Second Chief of the USDA Forest Service (1910-1920)

Henry Graves was born in Marietta, Ohio, May 3, 1871, the son of a professor of natural science at Phillips Academy in Andover, Massachusetts. He attended Phillips and Yale University (B.A., 1892; M.A., 1900) where he achieved scholastic success and demonstrated a capacity for leadership. At Yale he met Gifford Pinchot, a senior when Graves was a freshman. Upon Pinchot's advice, Graves took up forestry as a career and became the second American to study forestry in Europe. On his return from Germany, Graves joined Pinchot as a private consulting forester. The two men coauthored The White Pine (1896). When Pinchot became Chief of the U.S. Division of Forestry in 1898, he made Graves his assistant.

Both men realized the need for forestry training facilities in the United States and in 1900 Graves became director of the new Yale School of Forestry, where he remained for ten years. Funded by the Pinchot family, the Yale school provided a two-year graduate program leading to a M. F. degree; it included field work on the Pinchot estate in Milford, Pennsylvania. In addition to other academic duties and leadership in accreditation of forestry schools, Graves wrote two of the earliest American textbooks on forestry, Forest Mensuration (1906) and Principles of Handling Woodlands (1911).

Pinchot, after his dismissal as Chief of the Forest Service, was able to influence the selection of Graves as his successor, ensuring professional rather than political direction. As Chief from 1910 to 1920, Graves quickly restored orderly relationships among his agency, the Secretary of Agriculture,

and the Department of the Interior; overcame internal morale problems and distrust in Congress, the States, and the lumber industry, remaining after the Ballinger-Pinchot affair; continued investigations of private land claims within National Forests; promoted a policy for recreational use of forestlands;

began the purchase of critical watershed headwaters lands in the East as authorized under the Weeks Law; oversaw the opening of the Forest Products Laboratory in Madison, Wisconsin; and implemented cooperative fire-protection efforts with State and local agencies. During World War I Graves and several of his staff went to France to direct logging to supply lumber to the United States Army.

In 1922 Graves returned to the Yale School of Forestry as dean, serving until 1939. During that period he worked on several committees to advance standards of forestry education and conservation of natural resources, and he collaborated with Cedric H. Guise on the textbook, Forest Education (1932). Following World War II Graves chaired the joint committee on forestry of the National Research Council and the Society of American Foresters; the committee's findings and recommendations were published in 1947 under the title, Problems and Progress of Forestry in the United States. Graves also chaired a committee which laid the plans to include forestry and forest products in the program of the United Nations Food and Agriculture Organization program.

Graves was a president of the Society of American Foresters, of which he was a charter member (1900) and fellow; in 1944 he received its highest award, the Sir William Schlich Memorial Medal, and in 1950 was the first to receive its Gifford Pinchot Medal. Graves was twice president of the American Forestry Association. He received honorary LL.D. degrees from Lincoln Memorial, Syracuse, and Yale Universities (in 1922, 1923, and 1939, respectively). He died on March 7, 1951, in Brattleboro, Vt., near the end of his 80th year.

References: Henry Clepper, Professional Forestry in the United States (1971), pp. 124-28. William B. Greeley, "Henry Graves: The Great Conserver," American Forests 61 (April 1955): 20-21, 40-48. Harold K. Steen, The U.S. Forest Service: A History (1976), pp. 103-44.

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Graves died March 7, 1951 in Brattleboro, Vt.

References:

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(1)

Col. Henry Solon Graves

By Daniel Dildine

12/7
File Bio

Across the land foes of conservation could be heard rattling their sabers. The smell of public spoils, heavy in the air, heightened already keen, predatory instincts. The Forest Service calf, fattened by administrative fiat, awaited slaughter.

CWO

January's shroud enveloped old Forest Service headquarters at 930 F Street, Washington, D.C., simulating the constrained spirits inside. Ardor for battle waned. The old hosannas "conservation", "scientific management", "perpetual yield", rang hollow that winter of 1910 in the nation's capitol-the Chief was gone, long live the Chief. Into this desultory scenario strode Henry Solon Graves-a new chief.

effective Feb. 1

With the political demise of Gifford Pinchot, the Forest Service lost its architect. A weakening of the Service implied a concurrent reversal in the fortunes of American conservation whose nexus was constituted by Forest Service policy, philosophy and legislative successes.

Graves, thus, had to battle on two fronts. The administrative structure of Forest Service was being absorbed brick by brick into the amorphous Agriculture monolith. The resulting inertia and dissipation of that essential and traditional "esprit de corp" among Forest Service personnel created a sore that self-serving politicians, irresponsible stockmen, miners, water users, lumber interests eager to secure private use of public property, were quick to pick at.

Massachusetts

Henry Solon Graves, a no nonsense New Englander, was the man of the hour. Born May 3, 1871, the son of William B Graves, Professor of natural history at Phillips Academy, Andover, Massachusetts, Graves prepared for college at the same school. He entered Yale in ~~1892~~ 1888, and there proved himself possessed of a capable intellect, a sturdy body, and a potential for leadership; achieving high rank in scholarship, playing quarterback on the University team and elected ^{CLASS} ~~call~~ deacon. A.B. degree at Yale, 1892.

His first portentous assignation with the then proverbial gleam in the eye of its creator but soon to be Forest Service, as we know it today, was at Yale. The owner of the gleam was, of course, Gifford Pinchot. Pinchot and Graves were intimate friends competing (Pinchot was beaten out by Graves for a position on the Yale 11) and confiding in one another.

It was Pinchot who induced Graves to follow the forestry standard, the as yet unfurled, embryonic science (in the U.S.) clutched determinedly in the minds of a few visionaries. Following some preparatory, ^{ra} post-graduate work at Harvard from ¹⁸⁹³⁻⁹⁴ ~~1892-3~~, Graves joined Pinchot at George W. Vanderbilts's estate. The first application of scientific forestry to American conditions was then being conducted by Pinchot at the estate.

After a short period of practical work at Biltmore, Graves had no recourse but to go abroad to study in European schools, there being no forestry schools in the United States. He studied principally in Munich, under Sir Dietrich Brandis, Pinchot's old Don and the most hallowed of names in old world forestry.

1894-
1895?

Graves, returning to the U.S. teamed up with Pinchot again, first~~as~~ consulting forester~~s~~ in NEw York city , where they collaborated in the writing of the "White Pine" published in 1896. The following year, as a member of the U.S Geological Survery, Graves made an examination of the Black Hills Forest Reserve. The result of his trip west and other forest research was two publications "The Black Hills Forest Reserve" and "Practical Forestry in the Andirondacks". He later prepared two of the first american text books on forestry "Forest Mensuration", 1906; and "Principles of Handling Woodlands", 1911. On July 1, 1898, Pinchot was appointed Chief of the Forestry Division, Department of Agriculture; he accepted on the condition that Graves join him as assistant chief.

By 1900 the need for a professional forestry school, run by American Foresters, had long been apparent to Pinchot and Graves. The two men, in a typically cooperative manner, took the bull by the horns: the wealthy Pinchot family would endow a school of forestry at Yale; Harry Graves would run it. Under Graves direction the Yale Forestry school set the standard for forestry education in the United States. It furnished a corp of professionals to man the administrative posts of the Forestry Division. It likewise trained a cadre of teachers ^{for} ~~in newly created~~ forestry schools.

Graves, ensconced for ten years at Yale, was always in close touch with Forest Service activities. Thus, when the vagaries of politics propelled him to the chiefs chair in February of 1910, Graves brought with him the expertise of a forest scholar~~y~~ complete familiarity with Forest Service policy, organization and personnel.

Pinchot's dismissal inaugurated a new era for the forest service both within its Department of Agriculture berth and in dealings with powerful outside enemies. The Roosevelt days of automatic policy approval were gone. Many administrative functions formerly handled by Forest Service personell were curtailed. Legal work, disbursing and accounting work, were all to be handled by ^{the} mother agency. Forest Service publicity, that vital organ, so effectively wielded by Pinchot was to be controlled by the Secretary. This bureaueratic harassment sapped morale and drained energy reserves. Energy needed to combat very serious outside efforts to destroy the integrity of the National Forests.

Graves addressed himself, to the internal, administrative problems of the Service, in a direct confrontation with the Secretary, "Tama" Jim Wilson. Wilson had opposed Grave's appointment, angling for a political, non-professional appoitee, from the west. Only upon President Taft's direct orders did he relent to hiring Graves. He then began dealing with forestry matters directly, leaving Graves out as intermediary-a dangerous precedent. Graves, wary of having Forest Service prerogatives usurped, reversed Tama Wilson's strategy and advised President Taft directly of the situation, bypassing the Sec-^d as a link in the chain-of-command. Taft requested his Secretary stright-^a en matters out. The result of course was a painful interview but an interview with cathartic results. Graves asked for Tama Jim's confidence and cooperation in return for his impicit loyalty. The two men saw eye to eye, as ^d did Tama's successor (David F. Houston) and Graves. Graves was now abe to confront the more serious attacks, from outside the bueracracy, threatening the integrity of the National Forests.

Conservation, associated with the Forest Service, was often not understood. It sometimes appeared to stand in the way of public interests. For some (particularly in the west), it was anathema, interfering with progress in the form of the homesteader and miner. And, indeed Graves' administration did interfere. Acting as an investigatory agency verifying the legality of mineral claims under patent, the Service dis-credited scores of patents applied for merely as illegal spring boards to timber tracts, water sources or potential building sites. Graves himself inspected and exposed fraudulent patents. The Service was committed to Pinchot's ^{/resource} axiom "maximum benefit, for the maximum number of people, for perpetuity."

Graves had more to contend with than fraudulent patents chipping away the public domain. He fought a running battle with the Interior department over wholesale transfer of Forest Service lands to Interior; squelching several bills introduced in Congress favoring the transfer. Forest Service integrity was successfully maintained but an inordinate amount of time and energy was wasted. More energy was spent combating a threatened transfer of public domain to the individual states in which it was situated. Numerous such proposals were sought and rebuffed by Graves during his tenure. They were, for the most part, backed by western commercial interests, with political support, seeking special privileges on public property and opposing any public control of natural resources. The Forest Service, the conservation movement, and the young forestry profession dedicated to the movement, could thank Graves for his vigilance. The special interests, the covetous bureaucracy, were kept at bay.

That the embattled Forest Service, under Graves, was able to accom-

plish meaningful legislation, during its time of troubles, was a tribute to the Chief.

Under Graves, the Weeks law of March 1, 1911, was passed, providing the justification for a National Forest system in the east. The use of National Forest revenue to finance road building in local communities was conceived by Graves. A supreme court decision authorized Forest Service range rehabilitation, including the issuance of grazing permits, paid for by stockmen. The Forest Products Laboratory, established in 1910, opened up broad new areas of research during Graves tenure as Chief.

And, finally, Graves was responsible, in large part, for the essential cooperation of the Forest Service in the war effort during World War I. He arrived in France June 20, 1917 before the American Expeditionary Forces. He outlined their probable needs, located French timber tracts and requested that Forestry troops be sent to France. Eventually more than 20,000 men, the "Lumberjack Regiment," were engaged in war related lumbering operations. He returned to the United States in February, 1918, a Lieutenant Colonel, Resuming his duties as Chief. The moniker "Colonel" was often employed, during the rest of his career, in recognition of his wartime service. Graves resigned ^{from} ~~for~~ the Forest Service in 1920. He had successfully maintained the integrity of a fledgling agency and oversaw its development into a strong independent flyer.

Henry Graves returned to Yale School of Forestry in 1922 as Dean. From 1923 to 1927, he served as provost of the University. During his tenure at Yale, he participated in the Forest Education Inquiry resulting

in the publication of "Forest Education," by Graves and Cedric Guise in 1932. He retired, as dean and Sterling professor of forestry, emeritus, in 1939.

The United Nations Interim Committee on Food and Agriculture, in 1944, selected Graves to serve as Chairman of the Advisory Committee on Forestry.

Henry Graves belonged to numerous associations for the advancement of forestry and conservation. He was a member of the Mississippi Valley Committee and President of the New Haven Park Commission. He was a fellow of the Society of American Foresters and the American Geological Society; an honorary member of the American Academy of Arborists, the Royal British Arboricultural Society and the Royal Scottish Arboricultural Society. He also belonged to the American Forestry Association and the Societe Forestiere de Franche-Comti de Belfort.

Graves was the recipient of many distinctions and honors during his life time among them were: The honorary Master of Arts, from ~~Yale~~ ^{Harvard}, 1911; the LLD, Syracuse, 1923, and Yale, 1940; election as president of the Society of American Foresters, 1912; The Sir William Schlick memorial Medal, 1944; The Gifford Pinchot Medal, 1950.

Henry Solon Graves died at Brattleboro, Vermont, March 7, 1951, American conservation, and forestry in particular, owe an outstanding debt to his efforts ⁱⁿ ~~for~~ their behalf.

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Graves investigated the growth of white pine, an important commercial tree of the day. His (title) was published in 1896, which was the first professional investigation of a North American tree. Ch. (date) Graves followed in Pinchot's footsteps to study with Sir David Brandis in (place). When he returned, Pinchot, who was working as a consulting forester, invited Graves to be his associate.

history or science?

HENRY SOLON GRAVES (1871-1951)

1

a pioneer American forester.

Henry Solon Graves was ~~one of the pioneers of the~~ forestry profession in America. He was born in Marietta, Ohio on May 3, 1871, the son of William Blair and Luranah Graves. His father was ^a professor of natural science at Phillips Academy in Andover, Massachusetts. Graves attended Phillips Academy and entered ~~Harvard~~ ^{later Yale} University in 1888 ~~where he achieved~~ ^{where he achieved} ~~scholastic success~~ ^{scholastic success} as a scholar and demonstrated a ~~real~~ capacity for leadership. As a freshman, he won the position of quarterback from a senior, Gifford Pinchot. Pinchot and Graves became life-long friends and associates. From the beginning, Pinchot had a high regard for Henry Graves' ^{ability, courage,} ~~regarding~~ him as ~~straight, fearless, able, steadfast, untiring and with an~~ ^{and} unusual capacity to get along with people, ~~and to finish what he started.~~

When Gifford Pinchot became ^{America's first native-born professional forester,} ~~"America's first professional forester"~~, and ^{he} ~~while~~ introduced Graves to the ^{field} ~~concepts~~ of forestry. After Graves received his ~~Harv~~ Yale degree he took to the woods instead of intering politics. He gave up his teaching, studied ^{at} Biltmore, ~~and then~~ worked some months in the fields, then left for Europe to continue his studies as had Pinchot. Before leaving, Graves worked on the field data of the investigation of the growth of white pine. The results were published in 1896 and was the "first professional forester's account" of the growth of the North American tree which was the most important commercial timber tree of the day.¹

1. Service Bulletin, July 8, 1940, Commencement Exercises, June 19, 1940 Yale University, Henry Graves bestowed with honorary degree of L.L.D.
2. Pinchot, Breaking New Ground, p 733

Graves studied under Sir Dietrich Brandis and did field work on a government forest at Hambach Bei Juelich. When Graves returned to the United States, he brought back "professional equipment". . . far ahead of , . " Pinchot.¹ Pinchot invited Graves to serve as his assistant in consulting forestry and one of the first tasks was to help with an article being written for HARPERS WEEKLY on the significance of the constitutional amendment of 1894 prohibiting the cutting of ~~timber~~ timber in the New York State Forest Preserve. Graves had been working for three years in the basic sciences, mensuration, silviculture, organized management and other technical features of forestry and was competent in those areas. Later he was part of the ~~XXXX~~ U.S. Geological Survey of the Black Hills forest reserve.

On July 1, 1898, Gifford Pinchot ~~accepted appointment~~ ^{became} ~~as the~~ Chief of the Division of Forestry, USDA, with Henry S. Graves as his Assistant. As a result of Circular 21 issued on October 15, 1898, ^{the Division offered advice to farmers and lumbermen and Graves was placed in charge of the program} requests for assistance to apply Forestry to their holdings came in from farmers and lumbermen. Thus practical and paying forestry on ^{on a limited scale} ~~an important scale~~ was started. However, it was soon realized that the best way to get the facts needed was to ~~xxx~~ send American trained men into the forests to look, see, and measure.

L. Pinchot, BREAKING NEW GROUND, p 72

However, the Division's work was hampered by a lack of trained men. In order to remedy this problem, James Pinchot, Gifford's father, gave (about) \$100,000 for the establishment of the Yale School of Forestry. Gifford Pinchot was asked to become Dean of the new school. ^{to be organized as a separate school with a graduate program.}

look, see and measure.

The chief problem of the Division of Forestry in its expanding work was the shortage of men having a background of knowledge and experience in technical, ^{forestry} This situation continued to plague Pinchot and Graves. The existing schools in operation at Cornell and at Biltmore were ~~not~~ ^{only a} able to provide few men in the coming years. Graves shared the concern that forest officers on the reserves were for the most part "politically appointed", and that Supervisors and other officials in the organization should be qualified foresters. Both Graves and Pinchot believed that what was needed was men trained in American forests by American methods by American professors. Graves supplied the answer.

I recall saying one evening to Pinchot:
"If you and your family will give an
endowment for a Forest School at Yale, I
will go up and run it."¹

The establishment of the Yale School of Forestry
was *the development of American forestry.*
~~represents~~ a milestone in Forest development. ~~XXXXXXXXXXXXXXX~~

~~XXXXXXXXXXXXXX~~ The school was organized on a graduate basis and as
a separate school. This ~~permitted them to~~ was an important factor in
focusing attention on forest education, and recognition of forestry by
an institution like Yale would give to the movement a certain prestige in
the mind of the public.

The school enjoyed notable success because of its excellence of instruction developed by its original faculty, because of the scholastic excellence instilled in it by Graves.

1. Henry Clepper, PROFESSIONAL FORESTRY IN THE UNITED STATES, John Hopkins Press, Baltimore, 1971, p. 125. (Cited from a paper prepared for the meeting of the Dissenters, a literary group in New Haven.

highly-qualified who ~~developed~~ ^{became leaders in all phases of American forestry.} 4 *check*
It attracted students competent to develop leadership ~~and the~~ in administrative capacities who rose to high position both in Federal and state services and in private forest enterprises. ~~In addition,~~ ^{Yale} the school ~~had considerable influence~~ ^{influence of the school} was especially in educational fields. It not only set the pace for standards but provided future ~~future~~ staff for forest schools located throughout the nation. As late as 1950, half of the 22 accredited schools and department had Yale graduates and almost all had Yale men on the staff.

The initial staff at the Yale school was small and each man ~~was a~~ ^{became} a "recognized national leader" in his own field of interest, - Henry S. Graves ^{specialized in} Forest Policy and economics. ¹ In addition to preparing the curriculum, ~~it was also necessary to write the textbooks~~ ^{Graves also authored some of the first American Forestry textbooks.} which became "standard manuals" of instruction. In this area, Henry S.

~~Graves was invaluable and some of his publications include:~~

During his tenure as Dean of the Yale School of Forestry, Graves remained in close touch with Gifford Pinchot and perhaps shared his anguish arising from the Ballinger Issue which resulted in ~~the dismissal~~ ^{Pinchot's dismissal} of Pinchot. ~~However,~~ ^{He} he was not associated with the ~~politic~~ issue and had the distinction of being "recognized as the "most influential forester in the United States" after Pinchot.

The appointment of Graves as ^{second} Chief Forester ^{in 1910 at Pinchot's urging} did much to ensure that the forest service would continue to be operated by competent professionals rather than political appointees.

When Graves accepted the responsibility of Chief of the Forest Service he faced serious ~~problems ranging from rebuilding shattered moral to unending efforts to reclaim land placed within~~ ^{serious morale problems} ~~with the Forest Reserve.~~

1. Garratt, p 26 *and congressional distrust of the agency.*

October 9, 1945

HENRY SOLON GRAVES

HENRY SOLON GRAVES, holder of the Schlich Forestry Medal, was the second American to make forestry his career, as well as the second Chief of the United States Forest Service.

Born May 3, 1871, he graduated from Yale College in 1892. While a Yale undergraduate he met Gifford Pinchot, who became his life-long friend and who was responsible for Henry Graves selecting forestry as his life's work. After taking a special course in forestry at Harvard, Graves carried on forestry investigations in the field for a year and spent another year studying at the University of Munich. In 1898 he entered the Department of Agriculture as Assistant Chief of the Division of Forestry. There he remained until 1900 when he was called to Yale to organize the School of Forestry. He served as Director of the School until his appointment as Chief of the U. S. Forest Service in 1910. Succeeding his friend Gifford Pinchot, he led the Forest Service through a difficult and trying period. During World War I, Mr. Graves took leave of absence from the Forest Service to serve overseas in France with the Forestry Engineers, First as Major and later as Lt. Colonel.

In 1920 Col. Graves left the Forest Service to engage in the private practice of his profession and two years later was made Dean of the Yale School of Forestry and Sterling Professor of Forestry. He served in these capacities until 1939, when he became Professor emeritus.

The United Nations Interim Committee on Food and Agriculture in 1944 selected Henry S. Graves to serve as Chairman of the Advisory Committee on Forestry, a post which he still holds.

Mr. Graves received a degree of LL.D from Syracuse University in 1923 and the same degree from Yale in 1940. On August 1, 1944, at a meeting of the Washington Section, Society of American Foresters, Henry Solon Graves

was awarded the Schlich Forestry Medal for "distinguished service to American Forestry."

Col. Graves belongs to numerous associations for the advancement of forestry and conservation. He is a member of the Mississippi Valley Committee and president of the New Haven Park Commission. He is a fellow of the Society of American Foresters and the American Geog. Society; an honorary member of the American Academy of Arborists, the Royal British Arboricultural Society and the Royal Scottish Arboricultural Society. He also belongs to the American Forestry Association and the Societe Forestiere de Franche-Comti de Belfort.

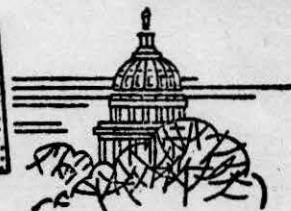
Among Col. Graves numerous writings are "Forest Mensuration" published in 1906 and "Principles of Handling Woodlands," 1911. In ¹⁸⁹⁶1906, he published "The White Pine" jointly with Gifford Pinchot, and in 1932, together with Cedric H. Guise, author^aed "Forest Edu^action."

L. M. Heisley

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INFORMATION DIGEST



Washington Office

IN-SERVICE ONLY

No. 23

March 8, 1951

Col. Henry Solon Graves, the second Chief of the Forest Service, died at Brattleboro, Vt., yesterday, March 7, after a long illness. Funeral services will be held at New Haven, Conn., at 2:30 p.m. on Friday afternoon.

Colonel Graves was one of the pioneers of the forestry profession in America. He was a lifelong friend of Gifford Pinchot, who appointed him assistant chief of the then Division of Forestry, U. S. Department of Agriculture, in 1898. Col. Graves resigned that position in 1900 to become the first director of the Yale School of Forestry where he served until 1910. He re-entered the Forest Service in 1910 as Chief Forester, which position he held until 1920, except for war service in 1917-18 when he was commissioned lieutenant colonel in the Corps of Engineers, U. S. Army. Returning to Yale in 1922 as dean of the School of Forestry, he served until his retirement as dean emeritus in 1939. During 1923-27 he was provost of Yale University. He was vice-president of the Society of American Foresters 1900-04; president in 1912; and a member of the Council in 1917 and 1920.

Colonel Graves was born May 3, 1871, in Marietta, Ohio. He was graduated from Yale College with the B.A. degree in 1892 and subsequently attended Harvard University and the University of Munich. He held the following honorary degrees: M.A. (Hon.), Harvard University 1911; M.A. Yale University 1920; LL.D. (Hon.) Lincoln Memorial University 1921, Syracuse University 1923, and Yale University 1940.

At the Golden Anniversary Meeting of the Society of American Foresters last December, the first award of the Gifford Pinchot Medal was made to Col. Graves in recognition of his service to forestry. Because of illness he was unable to be present to accept the award. In presenting the medal, President Evans said, in part;

Mr. Pinchot's lifelong friend, his companion on many a forest trail, and his good right arm in numerous righteous battles for conservation was the forester he affectionately called Harry:...

Deep in my heart I have the conviction that, were Mr. Pinchot still with us, nothing would please him more than to see Harry Graves receive this honor. I am equally convinced that, could Mr. Graves have been with us tonight, no honor within the ability of the Society to bestow would give him greater pleasure.

21

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(¹/₂ "Who Was Who in America")

Henry Solon Graves -

Born Marietta, Ohio, May 3, 1871

Son of Wm. Blair + Lurana (Hodge) Gra

A.B. Yale 1892. A.M. 1900. Special Studies

in forestry, Harvard and University of ¹⁸⁹⁴⁻⁹⁵ Maine

Hon. A.M. Harvard, 1911. LL.D. Syracuse Univ.

1923; Yale 1940. Father ^{natural history} ~~trust~~ ^{land} ~~at~~ ⁱⁿ Phillips Acad.

Marietta, ^{Andover, Mass.} Married Ella Marian Welch, Dec. 19, 1903.

Prof. forestry and Director, Forest School

Yale, 1900-10. Chief of U.S. Forest Service

(Sub.) 1910-20. Dean, School of Forestry, Yale

1922-39. Provost of Yale 21, 1923-27

Prof. emeritus Yale, 1939-51.

Member, Mississippi Valley Commission

(Public Works Administration).

Pres. New Haven Park Commission.

Lt. Col., Corps of Engineers, U.S. Army, 1917,

A.E.F.

Honorary Member, Am. Academy of Artists, Royal

British Arboricultural Society, Royal G.S.

Fellow, S.A.F., Am. Geog. Soc. Member, Am.

Forestry Assn., AAAS, Sigma Xi, etc.

(2)

Henry S. Graves - cont'd.

Author of:

Forest Mensuration, 1906.

Principles of Handling Woodlands, 1911.

Various bulletins.

Joint Author of The White Pine, 1891,

Forest Education, 1932.

Home: New Haven, Conn.

Died: March 7, 1951.

tion would provide a basis upon which to plan future developments and uses for similar areas. Then, too, there is history for history's sake, which may appeal to a brave few.

"A recent check-up on a small mountain valley in California shed considerable light on the value of historical data in explaining present conditions. Since settlement the uses had been hay production, dairying, beef cattle production, sheep grazing, logging, and stock driveway. Related to these were drought and abnormal run-off. Fortunately, records had been kept for a period of years so that it was possible to explain the changes that occurred in the valley floor and on the watershed. With this background future periodic observations will have especial value and interest.

"As a result of this study of a mountain valley, certain data have been found to be of particular value. Some of these are:

- "1. When possible, obtain an aeroplane photo of the area.
- "2. Take still pictures of critical spots, being careful to have the camera location and the angle recorded so that repeats can be made in future years.
- "3. Where vegetation is involved, make intensive samples of definitely described areas for plant density and composition.
- "4. Obtain the history of use in such a way that the character, intensity, and areas affected are recorded.
- "5. Make detailed large-scale maps of sample or key portions."

DEAN HENRY S. GRAVES TO RETIRE FROM YALE FACULTY

The retirement of Dean Henry S. Graves of the Yale School of Forestry in June was announced by President Charles Seymour on February 15. He will be succeeded by Dr. Samuel J. Record, Professor of Forest Products at Yale.

Dean Graves graduated from Yale College in 1892, and after taking a special course in forestry at Harvard for a year, carried on investigations in forestry in the field, and then spent a year abroad studying at the University of Munich. In 1898 he entered Government Service as Assistant Chief of the Division of Forestry in the Department of Agriculture, and remained there until 1900, when he was called to Yale to organize the School of Forestry. He served as Director of the School until 1910, when he was appointed Chief of the United States Forest Service. In 1920 he resigned from Government Service and for two years was engaged in the practice of his profession as a consulting forester. Since 1922 he has been Dean of the School of Forestry at Yale and Sterling Professor of Forestry.

Professor Record, who will assume office on July 1, is a graduate of Wabash College, and received the Master of Forestry degree from Yale in 1905. He was appointed to the Forest School faculty in 1910, and was promoted to the chair of Professor of Forest Products in 1917. Before coming to Yale he conducted many forest studies and he was the first Supervisor of the Arkansas and Ozark National Forests. He has been chiefly responsible for the development of Yale's studies in tropical woods. Under his direction the Yale collection of woods of the world has become the largest and most comprehensive, and now contains more than 36,000 specimens representing 11,100 different species. (From Yale University News Statement)

October 9, 1945

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GRAVES

HOGG

Mr. Graves, the second native American to become a professional forester, was Dean of the Yale University School of Forestry at the time of his appointment as the second Chief of the Forest Service in 1910.

Some of the outstanding accomplishments and notable events that characterized his administration included:

- In 1910, Forest Products Laboratory was established at Madison, Wisconsin.
- In 1911, Congress enacted the Weeks Law. The law provided for (1) federal and state cooperation in protection of forest land from fire; and (2) the acquisition of land for national forests on the headwaters of navigable streams.
- In 1911, the Forest Service began intensive scientific study of fire prevention and control, followed by notable increase in reforestation.
- In 1915, Branch of Research was established.
- During World War I the Forest Service went all out in research and production to fill the country's need for wood. Mr. Graves went to France with the title of Lt. Colonel to help set up a regiment to engage in logging and milling.

The Forest Service Backlashed

by HENRY CLEPPER

As a result of the Ballinger-Pinchot controversy, President Taft, on January 7, 1910, directed the Secretary of Agriculture to dismiss from office Gifford Pinchot, Forester, and Overton W. Price, Associate Forester.

Although not an egotistical man, Henry Graves had a nice appreciation of his own worth. He realized that the Forest Service, without the forceful Pinchot at its head and without the friendly interest of the White House, would be vulnerable to its enemies. At Yale, where he was dean of the Forest School, Graves had stood apart from Pinchot's row with Ballinger, hence was not publicly identified with the critics of the Taft administration. He was recognized as being the most influential forester in America after Pinchot. If anyone, he could run the Forest Service as a transition chief and keep the office out of politics. For should a politician without forestry education be named as chief, a precedent would be set that could continue the office as another bureau subject to political patronage. Graves decided to seek the job.

In a personal memoir he told frankly that he solicited the appointment. His account of this episode was prepared for a meeting of *The Dissenters*, a New Haven literary group of which he had long been a member.

When Gifford Pinchot was dismissed from the Forest Service by President Taft in January 1910, I was asked to take his place. I think it was Anson Stokes* who suggested my name to Mr. Taft. I have an idea that I suggested my name to Anson. The Yale Cor-

MR. CLEPPER is the former executive secretary of the Society of American Foresters. He is project director of a study of American forestry history sponsored by the Forest History Society under a special grant from Resources for the Future, Inc. His recent publications include The World of the Forest (with Arthur B. Meyer) and Origins of Conservation, of which he is co-author and editor.

poration gave me a year's leave of absence. My idea was to help in straightening out the confused situation, protect the position from political appointment, and, when a successor were found, I would return to Yale. I remained ten years. . . .

I found the Forest Service badly demoralized. The Chief, the Assistant Chief, and other high officers of the bureau had been dismissed; and Phil Wells, head of the legal division of the Service, had resigned in sympathy. The Secretary, James Wilson, and his immediate staff felt a lack of confidence in the Forest Service, and were imposing new restrictions in various procedures. The political and personal enemies of the Service were jubilant and looked forward to smashing the whole system of National Forests. In this category were strong elements among the organized mining interests of the West, the stockmen, the water power group, and especially land speculators of all kinds. And their interests were well represented in Congress.

The Secretary did not want to appoint me, but was overridden by Mr. Taft . . . I soon found that the Secretary had been conducting a sort of personal investigation of the Service. He had been corresponding directly with many of my field officers regarding various matters, and had arranged for a later tour with my Regional Foresters, all without consulting me. This fitted in with various incidents that indicated a definite trend on the part of the Secretary to go over my head in my own field of administration. I was so stirred up about the situation that I went to the President himself, thus going the Secretary one better in violating the principles of administration. Mr. Taft wrote a letter to Mr. Wilson to straighten out the matter with me. Of course there was a painful interview, but I took the initiative and told the Secretary that if he would give me his confidence, he would never find anyone more loyal. He saw that I meant it and we soon were working in fine harmony. The incident was never mentioned in our later close association together.

When Forester Graves and the Secretary agreed to bury the hatchet, it stayed buried during the remainder of Wilson's administration and through that of

*Anson Phelps Stokes, Jr. (1874-1958), prominent lawyer and educator; onetime secretary of Yale University. Graves became Chief Forester on February 1, 1910.

his successor, David F. Houston. According to Graves, Houston "was a new type of Secretary of Agriculture. He was an economist and an able executive. He was not popular with politicians or with farmers . . . Houston always gave me fine backing in my various administrative problems."

ALTHOUGH HENRY GRAVES made peace with the Secretary of Agriculture and stopped harassment from that quarter, his troubles had only begun. The Forest Service was kept on the defensive almost continuously during his administration by attacks from Congressmen, Senators, the Department of the Interior, and various private interests.

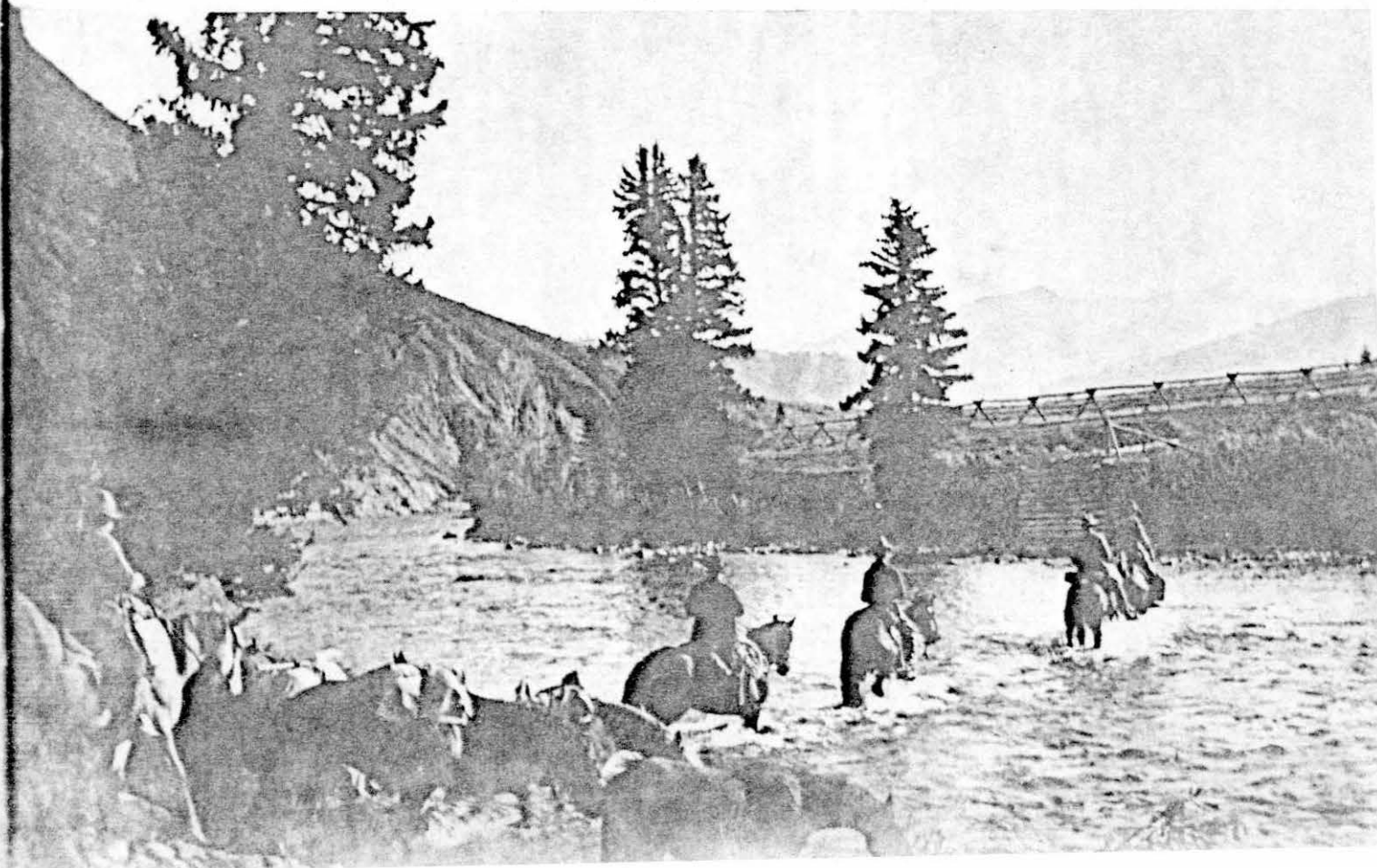
Among the formidable challengers of the Forest Service in Congress were four potent Senators—Joseph W. Bailey of Texas, William E. Borah and Weldon B. Heyburn of Idaho, and Albert B. Fall of New Mexico—who persistently advocated turning the national forests over to the states. An amendment to remove certain lands from the national forest system was sponsored by Senator Heyburn in May 1910. His accusations against the Forest Service varied from the libelous to the ridiculous. He accused rangers of shooting at citizens and of committing other "atro-

cities." He claimed that the forest officers conspired to defeat him for re-election. He denounced the Service for causing squirrels to starve to death by robbing their nests of tree seed for growing new forests. It was characteristic of this politician that when he was not sure what he was saying was true, he said it louder and with greater conviction.

In a letter to Charles Lathrop Pack in December 1912, Graves commented at length on threats to the national forest system:

This movement is for the most part inspired by interests which have consistently opposed public control of the natural resources and have argued for private control. . . . A leading part in the attempt to bring this policy forward has been played by certain water-power interests which desire to secure public land privileges of great value. Recently a series of attacks on the Forest Service has been made by certain mining interests which seek to prevent officers of the government from examining mining claims to determine whether the law has been complied with. The entire movement is in the interest of those who seek special privileges and the opportunity to secure public property or rights in public property for private purposes.

In 1918 Colonel Henry S. Graves made an inspection of game versus domestic stock use on the Teton National Forest. This Forest Service photo by Smith Riley shows the party crossing the Gros Ventre River near Redhill Bridge





The movement, Graves pointed out, was most conspicuous in Colorado. Governor Shafroth was a militant advocate of state control. Delegates from Colorado were in the majority at the Second Public Lands Convention in Denver in 1911, which was organized by rabid critics of federal conservation policy. Graves thought the issue "must be met squarely and fought to a conclusion." The values were tremendous:

So far as the National Forests alone are concerned, the proposed transfer means the grant outright by the people of the country to the individual states of at least two billion dollars worth of property. It means the surrender by the nation of all control over the resources now contained in the National Forests. It means also that the Nation will lose control over the protection of the headwaters of navigable streams and other very important national and interstate interests.

Borah

Fall

Graves and his Forest Service associates fought a running battle with a strong contingent of western senators and congressmen. Shown right are the five principal foes in the Senate: Henry M. Teller of Colorado, William E. Borah and Weldon B. Heyburn of Idaho, Albert B. Fall of New Mexico, and Joseph W. Bailey of Texas. Senator Heyburn in particular was a burr under the Forest Service saddle. He was openly committed to the dismemberment of what he called "the vicious system of forest reserves." (Graves photo courtesy of U. S. Forest Service; senatorial photos courtesy of Library of Congress)



Bailey



Heyburn



Teller

But this was not all. Another threat was imbedded in the proposal; this threat was to the growing profession of forestry and to the corps of dedicated foresters then in the Forest Service. Transfer of the national forests to the states would set back the notable progress then being made in building a profession based on civil service and the merit system.

In 1912 only a few states had forestry departments that were reasonably well financed and reasonably free from political influence. These forestry departments were mainly concerned with fire prevention and control. Forest management was largely custodial, and the practice of silviculture was sporadic indeed. Moreover, most states having experience with forestry were in the East. The states containing national forests were in the West, and lacked either personnel or policies competent to administer them. To be sure, the professional foresters then employed by the states were as dedicated as federal foresters, but there were less of them, and their tenure was uncertain. In short, the future of forestry in America, both as a public policy and as a profession, was at stake. Graves summed it up with a discouraging prediction: "The transfer would break up a strong, compact organization of trained and experienced men and create twenty new organizations, probably many of them in political hands, with many untrained men and new and varied policies."

No LEGISLATION was passed for returning the national forests to the states, but the threat was real and weakened the Forest Service in its dealings with other foes. Some of these were in the federal establishment.

Early in 1911 President Taft appointed Walter L. Fisher of Chicago as Secretary of the Interior to succeed Ballinger who had resigned. Fisher was no stranger to forestry. He had been active in Pinchot's National Conservation Association and was a Pinchot supporter in conservation as well as in politics. But this did not prevent him from proposing to Graves in October 1911 that the Forest Service be transferred to the Department of the Interior.

From the records it is not clear whether this proposal was made by Fisher with President Taft's approval or even knowledge. According to Elmo R. Richardson, in *The Politics of Conservation*, the President gave Fisher a free hand in policy decisions because Fisher generally had the goodwill of conservationists. In any case, Graves had reason to look upon the proposal as another instance of higher authority in the government threatening the integrity of the Forest Service.

Strained relations with the Department of the Interior no doubt reflected animosities aroused by the Ballinger-Pinchot controversy. They were also affected by the disappointment of preservationists and national parks enthusiasts over Pinchot's opposition to the pro-

posed bureau of national parks.

In the early 1900's there were few professional foresters in America, and their concern was mainly with the management of timber and the administration of forest land. As outdoorsmen they appreciated natural scenery and they are on record in letters, reports, and other writings as to the place of esthetics in their way of life. Thus when Gifford Pinchot told an audience in New York State that "forestry has nothing whatever to do with the planting of roadside trees . . . parks and gardens are foreign to its nature . . . scenery is altogether outside its province," he was speaking for himself. But since he was the most prominent spokesman of forestry and the doyen of the forestry profession, his voice was the one the public heard and listened to. Parks enthusiasts were not impressed.

It is a matter of record that Pinchot wanted the national parks as well as the forest reserves under the jurisdiction of the Department of Agriculture. He was supported in this by James R. Garfield, Secretary of the Interior, and Charles D. Walcott, director of Interior's Geological Survey, who served with Pinchot on President Roosevelt's Committee on the organization of Government Scientific Work. In a report of July 20, 1903, the Committee proposed that both the forest reserves and national parks "be entrusted to the Department of Agriculture." When one reads of Pinchot's alleged opposition to national parks and of his known conviction that they would be better managed under forestry principles in Agriculture, one must remember that his was not a lone voice.

It is a matter of record also that Pinchot opposed the creation of a separate bureau for national parks. Such a bureau, he wrote former Secretary Garfield in 1911, was "no more needed than two tails to a cat." But he was willing to support legislation that would put a national parks bureau in Agriculture. This was the recommendation of Secretary of Agriculture David F. Houston and doubtless reflected the viewpoint and hope of the Forest Service.

After Pinchot's departure, however, initiative passed to the Department of Interior, and it was not long before proposals for a separate national parks bureau were endorsed by President Taft. Graves too had changed his mind about the parks bureau and clarified the Forest Service position in a letter to William E. Colby, published in the *Sierra Club Bulletin* (1911):

I am surprised and exceedingly sorry to hear that there is an impression that the Forest Service is in any way opposed to the policy of national parks. This idea is entirely contrary to the facts, for I am, and always have been, emphatically in favor of a vigorous national park policy.

At one time I believed that the best plan would be to combine the administration of the national parks

and the national forests. While this unquestionably would be the most economical method of administration, there are various reasons why it may be wiser to have a separate bureau of national parks. I have, therefore, given my hearty approval to the idea of a bureau of national parks and have advocated it both in private and in public.

The National Park Service Act was finally passed on August 25, 1916, and along with it came a wave of enthusiasm for creating new parks and extending old ones. Notwithstanding his support for a "proper National Park extension program," Graves felt obliged to contest many park bills in Congress. As he explained to a conference of district foresters held in Salt Lake City in February 1916:

Any movement looking to the setting aside of a great natural wonder as a National Park will be supported, but the boundaries of any park which has my support must be so drawn that the Park administration will not be compelled to practice Forest administration. Some of the Park bills now before Congress will be opposed on this ground.

ANOTHER AREA of conflict with the Department of Interior involved patents to claims on national forest land for agriculture, mining, or other special purposes. The General Land Office in the Department of Interior functioned as a land court in approving these claims. As managers of the national forests in which the claims were made, the Forest Service had the unpleasant task of investigating claims to verify that the requirements of the law were upheld. This exercise of administrative responsibility led to frequent outcries during Graves' administration that the Forest Service was shutting out the homesteader and miner, hence blocking the development of the West. "The most grotesque misrepresentations of conditions were repeated in the Western press and in Congress," Graves recalled later.

In 1912 Senator Knute Nelson of Minnesota proposed an amendment to the agriculture appropriations bill directing the Forest Service to open for entry all national forest lands "fit and suitable for agriculture." Densely wooded areas, where the value of timber was many times the value of land when cleared, would have been opened for settlement. However well-intentioned Senator Nelson's amendment may have been, it would have resulted in irremediable dismemberment of the national forests, if not their total eradication.

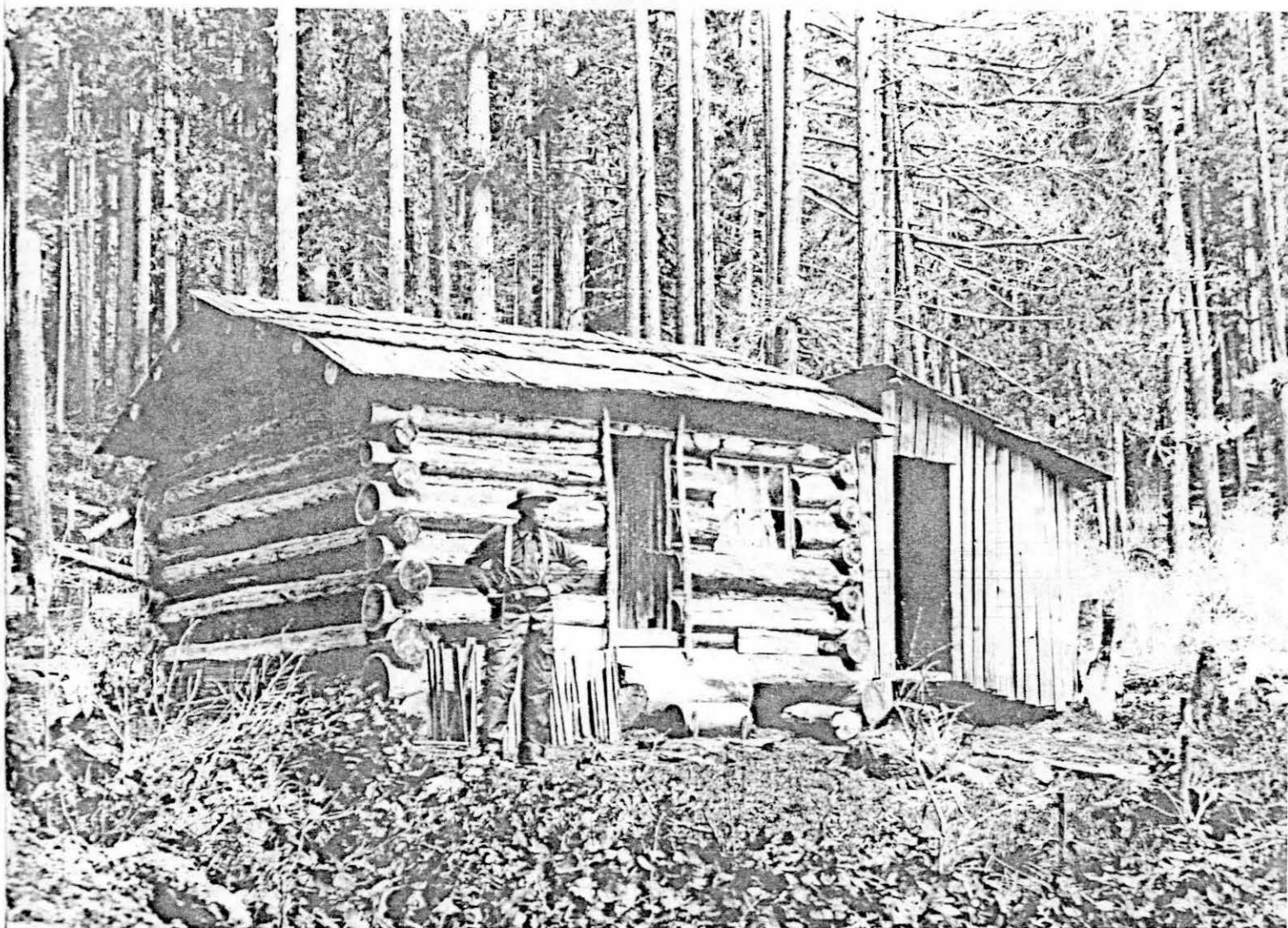
Fortunately, Nelson's amendment was reworded by the House of Representatives in keeping with the principles of the Forest Homestead Act of 1906, which had authorized the withdrawal of national forest lands for agriculture upon the request of an applicant after examination and approval by the Forest Service. Un-

der that act 1,144,359 acres had been opened to 12,000 settlers by June 30, 1912; in addition, 10,000,000 acres eliminated from the national forest system by presidential proclamations contained a great deal of agricultural land. The revised Agricultural Appropriations Act of August 10, 1912, provided \$25,000 to begin systematic classification of all national forest lands chiefly valuable for agriculture. This classification was pursued diligently during the next few years, beginning with lands closest to existing areas of settlement where the pressure was greatest.

Defending Forest Service policies before the National Conservation Congress, held in Indianapolis in October 1912, Graves charged that unrestricted entry would retard not facilitate agricultural development. Heavily-timbered homesteads were generally sold to lumber companies. The land lay undeveloped until the timber was cut, and afterward the settler had to pay a high price for it. Classification and timber sales were opening bona fide agricultural land to settlement, and this was desirable because settlers were an important line of defense against forest fires.

The consequences of unrestricted entry were made clear by a continuing investigation of claims patented before the national forests were transferred to the Department of Agriculture. The Chief Forester's annual reports for 1912, 1913, and 1914 are filled with examples of fraudulent claims uncovered by Forest Service investigators. Graves personally inspected forest homesteads on the St. Joe and Coeur d'Alene National Forests of Idaho in the summer of 1914. On the St. Joe, 208 of 264 homesteads had passed into the hands of lumber companies within three years after being patented. These disclosures did not spare the





Homesteaders built log cabins like that of J. J. Robinett (above) on the Umpqua National Forest in Oregon. At the left an old homesteader and his cats on the Wenatchee National Forest. Cats kept the cabin free of rats and mice and protected the homesteader's garden from chipmunks, ground squirrels, and other small vegetarians. U. S. Forest Service photos

Forest Service from criticism by special interests or the cant of politicians, but opposition faded gradually as the benefits of Graves' avowed policy of putting "every foot of land in the forests" to productive use became evident.

THE FOREST SERVICE faced a different set of problems in its relations with the livestock industry. Regulated grazing on the national forests began in 1906 under a system of fees and permits promulgated by the Secretary of Agriculture. Grazing control was positively essential if there was to be consistency, stability, and permanence of national forest administration and of the livestock industry. Under the old "free use" custom, stockmen turned their cattle and horses loose

to roam at will. Sheep were handled differently; they were herded in bands, but the bands were moved about with little regard to the condition of the range. They went wherever there was sufficient grass and water. "Dead lines," established in the early range wars between cattlemen and sheepmen, separated cattle ranges from sheep ranges. Almost everywhere grazing on the public lands was a chaotic business. Those defending the system and wanting to perpetuate it were almost wholly the large and strong outfits capable of enforcing their "rights" over the less strong and less well-financed.

These big livestock outfits were critical of government regulation as an invasion of their customary rights to graze on public land without restriction.

Graves was particularly bitter about the attitude of some sheepmen. They were among the most destructive users of the forest ranges, the least responsive to supervision, and the most unreasonable in their criticism of efforts to rehabilitate the resource by reducing and regulating the number of animals permitted to graze. In the aftermath of the Ballinger-Pinchot controversy, many stockmen began trespassing on national forest ranges under the impression that the regulations were not enforceable.

One group that resisted the permit system was the Grand Valley Stock Growers Association of Colorado. Fred Light, a homesteader and president of the Association, refused to take out a permit or to pay a fee for grazing his cattle on the Holy Cross Forest Reserve (now the Holy Cross Ranger District, White River National Forest). Moreover, he contended that the federal government was required by Colorado law to fence its land if it wanted to prevent trespass by livestock. This contention was supported by the Colorado Stock Growers Association and the American National Live Stock Association.

Light became the defendant in a test case brought by the Forest Service in federal court, a case that developed into a *cause celebre*. Newspapers throughout the West kept interest at the boiling point. The circuit court decided in the government's favor and enjoined the defendant from letting his stock go into the national forest. Under pressure from stockmen, the Colorado legislature appropriated funds to carry

the case to the Supreme Court. On May 1, 1911, the Supreme Court affirmed the lower court's decision. It upheld also the authority of the Forest Service to undertake management practices for rehabilitation of the range.

In spite of this decision, the National Live Stock Association and the National Woolgrowers Association continued to whip up opposition, even after numerous stockmen began to see the value and need of grazing regulations. Local permittees ceased their opposition and cooperated with forest officers as improvements from better range practices became evident. Among these improvements were construction of facilities for water supplies, access roads and trails, drift fences to control the movement of stock, and the eradication of poisonous weeds. The Forest Service also encouraged the establishment of local advisory boards to settle grazing problems. Permittees had assurance that their use of the range would be protected even if reduction in their herds became necessary. A certain stability, not previously enjoyed by the industry under its former competitive, unregulated customs, began to emerge.

TO ILLUSTRATE how tact and firmness by a forest officer overcame local hostility to grazing regulations, we have an account by Theodore Shoemaker, who entered the Forest Service in 1907. The following episode took place after he arrived in Denver in 1913 as newly-appointed supervisor of the Pike National Forest:

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The Platte Canyon district of the Pike was one of the hotbeds of this opposition, and all attempts at overcoming it had failed. Here was the home of E. M. Ammons who later became Governor of Colorado, mainly on the strength of the bitterness with which he attacked the Forest Service and the principle of federal control of the public lands. His relatives and neighbors ran cattle here and looked to his leadership to back them in thwarting the regulations at every point. Cattle were grazed yearlong so that it was impossible to get a count on the numbers each man owned, and it was notorious that they were paying the fees on only a fraction of the numbers grazed. Moreover, handling was lax and certain areas were badly overgrazed while others were little used. Something had to be done, but how to set about dealing with people who either would not speak to a forest officer or spoke only to insult and belittle?

Supervisor Shoemaker studied the problem for a year, then decided to call a meeting of the stockmen in a local schoolhouse. He recalled the meeting in his reminiscences:

They turned out to a man, and they didn't wait to be called to order. They cursed the Forest Service up one side and down the other. They strode about the schoolroom, most of them wearing side arms. One of the biggest owners, an aged old-timer, after delivering an especially blasphemous tirade, stalked out the door and we heard his spurs clanging down the walk. He didn't come back.

After an hour or more of blustering and blowing off steam things quieted down somewhat, and one of the

stockmen who had taken no part in the tirade arose and asked to speak. . . . The gist of his remarks was that since the call for the meeting by the representatives of the Forest Service indicated there were problems in the matter of range allotments, use of the range, issuance of permits, etc., which they wished to discuss, that they had arranged for the use of the schoolhouse for the meeting, and had listened to everybody's remarks respectfully, it was only fair to listen to what "they" had to say

I thanked them for coming and for stating their views so frankly. I then explained that since they owned the stock and the government owned the land they grazed upon we had to deal on some basis, and that we wanted it to be in a friendly and cooperative manner

I pointed out, too, that they were not the only class of persons concerned in the use of their range, since every acre of it was on the watershed from which 200,000 people in Denver got their water. Therefore, if we overgrazed the range, causing erosion to take place, left dead critters in the streams, or let the forests burn, we were sure to hear from the folks in Denver. I suggested that since this was our common problem we should get together and face it squarely.

Shoemaker then made suggestions for better utilization of the range by reducing overgrazing and by more efficiently distributing the stock. He then let them know that they could no longer run more stock than their permits called for, a practice they could correct by voluntarily reducing the numbers of animals in accordance with the number on the permit, or by paying fees for the number actually grazed.

I have gone to some length [continued Shoemaker] in portraying this situation, for I am sure it typifies the feeling of the old-timers who had settled the country and run their stock when, where, and as they pleased, without paying and without asking anyone for the privilege. . . . In some districts, and this one in particular, there was a great deal of mistrust among the stockmen, of course, which stood in the way of any progress toward better and more profitable use of the range.

Shoemaker concludes this episode by remarking that in time the stockmen's distrust was replaced by "friendliness and even comradeship."

Gallatin National Forest was inspected by Colonel Graves in 1917. His party (far left) is seen examining cattle and elk grazing land in the Gallatin Basin. Theodore Shoemaker and K. D. Swan appear in field dress about 1928 (near left). U. S. Forest Service photos



Paul H. Roberts, career range management specialist in the Forest Service for many years, once wrote, "Grazing use, since the creation of the Forest Service, has been the most difficult activity to administer. There has never been a time in the experience of this writer when some segment of the livestock industry was not in a battle with the Forest Service over local or national issues."

"THE MINING LAWS," Graves wrote in his annual report for 1913, "afford the greatest cloak for land frauds in the National Forests, and have been more commonly misused than the other laws." Patents to mining claims were repeatedly applied for by persons wanting to get control of timber, water supplies, power sites, sites for dwellings and resorts, even town sites, or simply a hole in the ground in order to sell mining stock. Naturally, these gentry were harshly critical of the Service. Graves countered their charges with pages of facts in his annual reports, and once led a field trip to inspect a supposed manganese claim in the Olympic National Forest. The manganese claim, of course, proved nonexistent. Legitimate prospectors and the responsible elements in the mining industry had few reasons to defame the Service, but this did not seem to reach the newspapers or the halls of Congress.

One of the problem areas was in the Black Hills of South Dakota. George A. Duthie, who became a forest assistant in 1909, has left us this historical sketch of mining claims in the Black Hills:

There had been strong opposition to the establishment of a national forest in the Black Hills both from the homesteaders and the mining interests. The opposition of the latter was influential enough to suspend the reservation for one year and during that period a very large part of the Black Hills was covered by mining locations. There was a theory, widely circulated, that these locations automatically nullified the national forest reservation and therefore the Forest Service had no jurisdiction over land covered by the mineral entries. Upon this premise any kind of trespass, the cutting of timber, grazing of livestock or occupancy for any purpose was justified. This, of course, resulted in many trespass cases. This conflict with the mining interests was the natural outgrowth of the free and easy attitude toward the appropriation of government land and resources which had grown up through the years of settlement. It simply fell to the lot of the Forest Service to be the first agency to enforce the principle that the public has vested rights in the public domain which individuals must respect.

Duthie was first assigned to a timber survey crew of 15 rangers and assistants who made an estimate of the timber cut in trespass from mineral locations by the Safe Investment Gold Mining Company. This company's operations were mainly promotional stock sell-

ing, rather than mining. It had located some 6,000 acres under mineral entry, then cut the standing timber from a large part of the area before the Forest Service stopped it. The court rendered judgment in favor of the Forest Service and stopped the company's stock sales, after which it passed into oblivion. In many of these conflicts, local newspapers championed the cause of the mining promoters and attacked the Forest Service.

THAT THE BACKLASH against the Forest Service was not imaginary is evident from the writings and recollections of many people both inside and outside the Service. The effects of this hostility are all too evident in a memorandum from Chief Forester Graves to Secretary of Agriculture David F. Houston on June 19, 1916. It reflects, as hardly any other document of the era does, the frustrations and difficulties of a dedicated civil servant:

During the past year the forces of reaction, which have never ceased their efforts to undermine the National Forest System, have made such headway that unless vigorous steps are taken to counteract this adverse movement the most serious consequences are imminent.

I do not recall any session of Congress when so many measures damaging to the National Forests have been given serious consideration, or when there was such a spirit of yielding to the demands of private interests for special grants and privileges on the public property; or when there was such a tendency to turn from the present day point of view back to the old nineteenth century indiscriminate policy of land distribution.

The situation is that a number of such bills have already passed either the House or the Senate with very strong support and little opposition; most of them have passed by unanimous consent. These adverse measures do not take the form of directly abolishing the National Forest system. Such an attack would doubtless arouse opposition. The drive on the forests is more subtle and insidious. It is a process of attrition which will cripple or make inefficient the administration of the Forests, or break up their integrity and finally cause the system to crumble to pieces. . . .

I attribute the present situation in part to a general reaction against conservation. I attribute it in part also to the failure of the Executive departments to make it clear that they are definitely opposed to legislation which constantly nibbles at the National Forests. Most of the measures which constitute, as I see it, the greatest danger to the National Forests have been approved by the Secretary of the Interior.

Notwithstanding the backlash endured by the Forest Service during the period 1910-1920, notable advancements in forest conservation were made. The first of consequence in Graves' administration was the es-

establishment in 1910 of the Forest Products Laboratory at Madison, Wisconsin. Then, in 1911, Congress enacted the far-reaching Weeks Act which provided for federal and state cooperation in protection of forests from fire and for the acquisition of national forests on the headwaters of navigable streams. To be sure, the groundwork for these developments had been laid during the Pinchot regime.

In 1915 the Branch of Research was created in the Forest Service. It not only correlated all the experimental field work being done throughout the country, but it gave research a status equal to the Service's administrative branches. With United States entry into World War I, the Forest Service undertook increased responsibility for the production of wood and for research into its war uses. Graves was assigned by the War Department to help organize a regiment to engage in logging and milling in France. During part of 1917 he held the temporary rank of lieutenant colonel.

Following the war, Graves put the influence of the Forest Service behind a campaign for public regulation of timber cutting on private land. This was a controversy that he would periodically be engaged in for the next quarter-century. But not as chief of the Forest Service. He resigned in March 1920 and was succeeded by William B. Greeley.

During this decade (1911-1920), as never before or since, the development of forestry and the growth of the forestry profession were bound to the success of the Forest Service. Had the bitter anti-conservation hostility to the Forest Service prevailed, forestry, both as a developing public policy and as an emerging profession, could have been set back for decades. Politicians like Senator Heyburn were openly committed to

the dismemberment of what he called "the vicious system of forest reserves." Senator Henry M. Teller of Colorado, a former Secretary of the Interior (1882-1885), might have been expected to have shown some consideration for the interests of future generations in the natural resources of the West. But in 1909 he declared, "I do not believe there is either a moral or any other claim upon me to postpone the use of what nature has given me, so that the next generation or generations may have an opportunity to get what I myself ought to get." Their hostility to the Forest Service derived from the unwillingness of the Service to permit resources to be exploited for the immediate and temporary benefit of a few.

Inman F. Eldredge, whose Forest Service career began in 1905, and who when he died was one of the profession's most respected and beloved members, summed up his own recollection of a difficult period in these words: "The lowest ebb in the Forest Service, when morale and money and everything else went into a deep dip, was during Taft's administration after the Pinchot controversy with Ballinger. Then we were punished, and I mean in every possible way; the Department of Agriculture just went after our scalps. There were years when nobody got a promotion in the Forest Service. It went on from 1910, I should say, until close to 1920 before we commenced to get our heads up."

In accepting appointment as Forester, Graves considered himself as a transition chief, a temporary custodian of the office during a critical period. His supreme achievement was this: he kept the national forest system from becoming a spoil of politicians and the Forest Service from going under. Δ

NOTE ON SOURCES

Among the unpublished sources consulted were the papers of Henry Solon Graves at Yale University; Theodore Shoemaker, "Some of My Experiences in the Forest Service," a typescript loaned by (Mrs.) Lee Shoemaker, Missoula, Mont.; George A. Duthie, personal diary in the Conservation Library Center, Denver, Colo.; Royal S. Kellogg, oral interview conducted by Elwood R. Maunder, Forest History Society, New Haven, Conn.; records in the regional offices of the U. S. Forest Service in Denver, Colo., Portland, Ore., and San Francisco, Calif.

Among the published sources were the *Congressional Record*, 62d Cong., 2d sess.; I. F. Eldredge, "Ride the White Horse," *Forest History* (Winter and Spring, 1960); *The Western Range* (Washington, 1936); John Ise, *The United States Forest Policy* (New Haven, 1920); Gifford Pinchot, *Breaking New Ground* (New York, 1947); Elmo R. Richardson, *The Politics of Conservation* (Berkeley, 1962); Paul H. Roberts, *Hoofprints on Forest Ranges* (San Antonio, 1963). The *Denver Post* and *Rocky Mountain News* for the years 1910 and 1911 provided much regional information. News items in *American Forestry* and the *Journal of Forestry* for 1910-1920 tell much about the era.



Prospector's cabin in Blackfeet National Forest, 1898

Henry S. Graves Awarded Schlich Forestry Medal

HENRY S. GRAVES, New Haven, Conn., dean emeritus of the School of Forestry, Yale University, was awarded the Sir William Schlich memorial medal for distinguished service to American forestry at a meeting of the Washington Section, Society of American Foresters, held in the Cosmos Club, Washington, D. C., on the evening of August 1.

This medal was named in honor of the late Sir William Schlich (1840-1925), who established the forest service in India and was professor of forestry at Oxford University. In order to perpetuate his memory a fund was subscribed by his friends and admirers in the British Empire and the United States.

The medal has been awarded only twice before in the United States. It was bestowed in 1935 on President Roosevelt, an honorary member of the Society of American Foresters, for his leadership in the forest conservation movement. It was not awarded again until 1940 when it was presented to Gifford Pinchot, first president and Fellow of the Society, and first chief of the U. S. Forest Service, at the Society's 40th anniversary meeting held in Washington.

Until his retirement in 1939, Dean Graves had been head of the Yale School of Forestry since 1921. He was chief of the U. S. Forest Service from 1910 to 1920. In 1918 he was commanding officer of the Allied forest engineer regiments in France and Belgium. At present he is chairman of the subcommittee on forestry and forest products of the United Nations Interim Commission on Food and Agriculture.

Presentation of the medal was to have been made by Mr. Pinchot, but he was prevented by sudden illness from attending the meeting. His brief address prepared for the occasion was read by Dr. C. F. Korstian, immediate past president and Fellow of the Society, who acting for Mr. Pinchot and in behalf of the Society, presented the medal to Dean Graves. Mr. Pinchot's statement follows:

"We honor Sir William Schlich because he made a great contribution to the progress of forestry. He, like Sir Dietrich Brandis (of whose immense service to American forestry I shall say nothing tonight), served as inspector general of forests to the government of British India. Later, as head of the school of forestry at Cooper's Hill

and professor of forestry at the University of Oxford, he was the leader of professional forestry in England.

"When I began to study forestry abroad in 1889, it was my good fortune to profit by his wise and kindly advice, and for many years thereafter, until his death in 1925.

"After his death, a memorial trust fund was created in his name and in his honor, to continue throughout the world the good work to which he had devoted his life. In the United States, the custodian of the fund is the Society of American Foresters, which has three times awarded the Sir William Schlich Memorial Medal to Americans. The first was presented to Franklin Delano Roosevelt, President of the United States. The third I am about to present, as the representative of the Society for that purpose, to Henry S. Graves, first head and first dean of the Yale School of Forestry and second chief forester of the United States. It gives me the greatest personal and professional satisfaction to do so.

"In the class of 1892 at Yale there was an able, upright, quiet, courageous, athletic youngster, who was chosen by his fellows as one of the three class deacons of '92. It was the business of the deacons to lead and guide the religious life of the class.

"The deacons of the four classes carried on their work in friendly cooperation. And so,



HENRY SOLON GRAVES

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since I also was a deacon, I came to know Harry Graves and appreciate his qualities and capacities. I appreciated them especially when we both tried for the same position on the Yale eleven. He won it. I didn't.

"When I came back to America after studying my future profession in Europe, there being as yet no school of forestry in this country, it appeared very quickly that one man alone could do little toward the introduction of forestry in the vast forests of the United States. There was urgent need for all the help I could get. After much consideration, the man I wanted most to give that help (if I could get him) was Harry Graves, then teaching at King's School in Stamford, Conn. So I put the question to him.

"It was my great good fortune, and still more the good fortune of forestry in America, that his answer was 'Yes.' Only one other American before him had chosen forestry for his profession. When Graves had chosen it, he proceeded, with the thoroughness and determination which are among his most marked characteristics, to acquire the training he needed abroad and bring it back home.

"Since then we have worked together intimately, happily, and I think I may say not without success, for the advancement of forestry in America. We have travelled together the forests of the East and the West, winter and summer, in wet weather and dry weather, afoot and on horseback, in good luck and in hard luck. Together we studied those forests, of which so little was known as foresters should know them. Together we learned new facts in forestry, and wrote about them. When I was offered the position of head of the little old Forestry Division in the Department of Agriculture, I accepted on condition that Harry Graves would come and give me a hand.

"But the demand for more foresters was far from satisfied. When the Yale School of Forestry was planned to supply them, Graves took a leading part in the planning. When it was established, he was the one man to head it. Much as I hated to lose him from the work in Washington, there was no other way, for no one else was so well fitted for the task. And from then on the character and standing he gave the Yale School, and the high quality and performance of its graduates, gave abundant proof of his vision, his ability, and his strength.

"But there was other proof in abundance.



SCHLICH MEMORIAL MEDAL

When the Forest Service needed a chief in 1910, again he was the one man for the place. And for a decade he led the Service through difficulties and dangers, in the consolidation of past gains and in new achievements which have given him a reputation and earned him a respect which will not soon be forgotten.

"To have been at the head of the Yale School of Forestry and the United States Forest Service is monument enough for any man. But there is more, much more. After Graves had returned to the School of Forestry at New Haven in 1922 as its dean, the Yale Corporation, sorely needing a man of executive power, made him also provost of the University. If I were to enumerate the commissions to which Graves has been appointed such as the National Conservation Commission (which made the first inventory of natural resources ever prepared for any nation) and describe his work on the National Resources Board; if I were to tell of his studies in forestry education in America; the books he has published; the learned societies, at home and abroad, to which he has been elected; the degrees he holds, from LL.D. down; the studies he has made of American forests; the study now in progress of forests of the world by an international commission which he heads, I would exhaust your patience. It is a record of which no man could be otherwise than proud.

"Henry S. Graves served his country in the first world war as lieutenant colonel in the Corps of Engineers. Let that never be forgotten, nor the fact that he has been among the most valu-

able and productive citizens of his time. He is, in the words of St. Thomas á Kempis 'full of years and of labors, of neither weary.' He has deserved well of the Republic.

"Henry S. Graves, in memory of Sir William Schlich and in the name of the Society of American Foresters, I have the honor and the profound pleasure of presenting to you the Sir William Schlich memorial medal for distinguished service to American forestry. Well and truly have you earned it by a life devoted to the service of the people in forestry and in conservation. May you live long to enjoy the admiration and affection of your fellow foresters, and the respect of all who know you. It is yours by right."

An informal address on forestry developments in India and in the British colonies was given by H. G. Champion, director of the Imperial Institute of Forestry and professor of forestry at the University of Oxford. He was former district conservator of forests for India, was a forestry student under Sir William, and is a trustee of the Sir William Schlich Memorial Foundation.

He was in the United States as representative of Great Britain on the United Nations subcommittee on forestry and forest products.

Dr. Henry Hopp, forester in the Soil Conservation Service and chairman of the Washington Section, presided.