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Regional Oral History Office

A SUMMARY OF THE CAREER OF TOM GILL,
INTERNATIONAL FORESTER

An Interview Conducted by

Amelia R. Fry

Berkeley

1969



TOM GILL

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PREFACE

This interview was made possible by a grant from Resources for the Future, Inc., under which the Regional Oral History Office of the Bancroft Library at the University of California at Berkeley embarked on a series of interviews to trace the history of policy in the U. S. Forest Service. Dr. Henry Vaux, Professor of Forestry, University of California, Berkeley, is the Principal Investigator of this project. Copies of the manuscripts are on deposit in the Bancroft Library of the University of California at Berkeley; also in the Department of Special Collections, UCLA Library; in the Forest History Society, Yale University; and in the library of Resources for the Future, Washington, D. C.

The Regional Oral History Office was established to tape record autobiographical interviews with persons prominent in the recent history of the West. The Office is under the administrative supervision of the Director of the Bancroft Library.

Willa Klug Baum, Head
Regional Oral History Office

Regional Oral History Office
Room 486 The Bancroft Library
University of California
Berkeley, California

THE RESOURCES FOR THE FUTURE SERIES
tape recorded interviews on
THE HISTORY OF FOREST POLICY, 1900-1950

1. Clepper, Henry, Executive Secretary, Society of American Foresters.
2. Dana, Samuel T., Dean, School of Natural Resources, University of Michigan
3. Gill, Tom, Forester, author, head of Pack foundation.
4. Granger, Christopher, Assistant Chief of the Forest Service, national forest administration.
5. Hall, R. Clifford, Director, Forest Taxation Inquiry.
6. Hartzog, George B., Director, National Park Service.
7. Hornaday, Fred, Executive Vice-president of American Forestry Association; and Pomeroy, Kenneth, Chief Forester for A.F.A.
8. Kotok, I. E., Assistant Chief of the Forest Service, state and private forestry; research.
9. Kniepp, Leon F., Assistant Chief of the Forest Service, land and acquisition.
10. Marsh, Raymond, Assistant Chief of the U. S. Forest Service under Earle Clapp.
11. Peirce, Earl, Chief, Division of State Cooperation, USFS.
12. Ringland, Arthur, Regional Forester, Region 3; Executive Secretary of National Conference on Outdoor Recreation; founder of CARE.
13. Roberts, Paul, Director, Prairie States Forestry Projects;
14. Shepard, Harold B., in charge of Insurance Study, conducted by the Northeastern Experiment Station with Yale University.
15. Sieker, John H., Chief of Division of Recreation and Lands.
16. Swift, Lloyd, Chief of Division of Wildlife Management.

DESCRIPTION OF SERIES

Interviews: A Documentation of the Development of
the U.S. Forest Service 1900-1950

This Resources for the Future interview series on the birth and development of the Forest Service began as a sudden disturbance in the ever-active brain of Ed I. Kotok in early 1964. One wintry day in early 1964, as we were putting away the tape recorder after one of our last sessions together, I mentioned casually that I would not be in the Bay Area for the summer: I had to go East.

Ed's eyebrows shot up. It was obvious that a final piece had fallen into place in a mental jigsaw that he had been carrying around for some time. He said that there were quite a few of his retired colleagues still in Washington, D.C., some of whom were the original "Pinchot boys." If only, he mused, the Oral History Office could find financing for an entire series on the Forest Service, maybe from a foundation like Resources for the Future.

Henry Vaux, then Dean of the School of Forestry at Berkeley, was the logical one to turn to. He gave advice and counsel on a priority system for selecting the men to interview. From deep in his perspective of specialized knowledge of forest policy, he saw the opportunity to preserve information that would otherwise be permanently lost.* At best, the tape-recorded memoirs could reveal, more frankly than annual reports and official letters, some of the political and economic facts of life that influenced the development of policy in the agency. The actual decision-making process, told first-hand and linked with the official rationales and actions on particular issues, could be useful in appraising contemporary policy questions and their multiple alternatives. Today, as in 1905, forest policy is a field where special interest pressures are in a state of varying equilibrium with the public interest. To see the policies and decisions of the past materialize, to witness through the administrators' eyes the expected or (more often) the surprising effect of those actions in the past - such a visible continuum could provide a depth of experience for those who are presently wrestling with the economic and political disequilibriums of resource management.

Horace Albright, a veteran interviewee of oral history operations, lent his encouragement to us and probably his enthusiasm to his friends on the board of Resources for the Future. We contacted three top-priority potential interviewees to see if they were willing to indulge us in our tape recording scheme, and we received a yes, a no, and a maybe. This changed to two yeses and, in place of the no, a substitute interviewee equally as valuable. By late spring, a modest grant to the Oral History Office marked the beginning of the series, Henry Vaux agreed to be Principle Investigator, and we were off.

* See appendix, Letter from Vaux to Fry, March 20, 1964.

Structure of the Series

The series, with a working title of "The History of Forest Service Policy, 1900-1950", began and ended as a multiple use project. Its major aim was to provide tape-recorded interviews with men in the Forest Service who during most of the half-century had been in policy-making positions. The series also served as a pilot attempt to try the relatively new technique of oral history as a method of gathering primary information within a specific subject field (one which might be defined here as the origins, operations, and effects of policy in public administration). The method, in turn, was hung on the superstructure of a list of retirees who were considered to be able to contribute the most to that subject.

Each major interview contains the standard stock of questions on Service-wide controversies of the past: the attempts to reorganize the conservation agencies - specifically, to transfer the Forest Service out of the Department of Agriculture; the efforts to get passage of federal legislation that would have regulated timber management on private lands; the competition with other agencies and with private owners for land acquisition determinations; on-going issues, such as competing land uses like mining or grazing, which often reflected years of patient negotiation with and bearing up under the pressures of well-organized special interest groups.

Each interview covers as well topics that are unique to that particular person's experiences, so that tracing "policy in its origins, operations, and effects," necessitated a detective job to discover, before an interview took place, those policy questions with which the particular individual had had experience. It was here that an interviewee's own contemporaries frequently gave guidance and counsel; advice was also provided by academic specialists in forest economics, recreation, fire control, silviculture, and so on.

Given questions on the same subjects, the interviewees sometimes speak to them from contrasting points of view, and thereby provide a critique of inner validity for the series. For instance, while Lee Kneipp and Ed Crafts comment on the informal power in Congress of the Forest Service's widespread constituency, other men (such as Ed Kotok) who actually had been in the field and involved in local public relations verify how the system worked.

The structure of an oral history series depends on many factors beyond the control of the oral historian: the health of the interviewee, his willingness to interview, and how much he can or will say about his career. The fluid state of our interview list caused our cup to runneth over more than once with more interviewees than we could add to our original list of three. Twice the list was enlarged - and fortunately funded further by Resources for the Future. The phenomenon of expansion was due largely to the tendencies of a few memoirists (especially Christopher Granger, Lee Kneipp, and Raymond Marsh) to touch lightly on events in which he had only slight involvement, then refer the interviewer to the man who could tell the whole story from a leader's eye view. The result is that some of the interviews on the accompanying list are one-subject, supplemental manuscripts.

Results

One will find more comprehensive and general information in the longer interviews of Christopher Granger (who was the head of timber management), Ed I. Kotok (Research; state and private forestry), Leon F. Kneipp (land acquisition and management), Arthur Ringland (field activities in setting up the new forests under Gifford Pinchot), Tom Gill (international forestry), Ed Crafts (Congressional relations), and Samuel T. Dana (Research; forestry education), the latter interviewed in cooperation with Elwood Maunder of the Forest History Society. Earle Clapp (research, Acting Chief), shunned the tape-recorder and is currently proof-reading his own written account of his career, a manuscript that will be deposited in Bancroft Library along with the other interviews.

The single subject interviews consist of Paul Roberts on the shelter belt project of the New Deal; R. Clifford Hall's account of the Forest Taxation Inquiry, coupled with H.B. Shepard's story of the Insurance Study. A view from without is provided by Henry Clepper of the Society of American Foresters and Fred Hornaday and Kenneth Pomeroy of the American Forestry Association - a trio who provide a fitting introduction to the series for the reader. George B. Hartzog, Director of the National Parks, comments on the relationship of the two agencies; Earle Peirce gives a first-hand account of the first time the Forest Service stepped in as principal agent in salvage operations following a disastrous blow-down on both state and private timberlands. John Sieker and Lloyd Swift both contributed a telling picture of their respective divisions of recreation and wildlife management. Without these shorter, from-the-horses' mouth accounts, the series would have sacrificed some of its validity. There are of course still other leaders who can give valuable historic information on policy development, men who perhaps can be included in the Forest Service's current efforts to further document its own Service history.

With a backward glance at the project, one can say that the basic objective of tape-recording, transcribing, and editing interviews with top men in the Forest Service was realized. The question of quality and value of the interviews must be decided later, for the prime value will be measured by the amount of unique material scholars use: the candid evaluations of leaders by other leaders, the reasons behind decisions, and the human reflections of those in authority; how they talked in conversation, how they developed trends of thought and responded to questions that at times were neutral, at other times challenging. The value of the series also depends on how many leads lie in the pages of the transcripts - clues and references that a researcher might otherwise never connect in his mind or in the papers and reports he reads.

Since this series was built with tentative hopes that in the end it could justify itself both as a readable series of historical manuscripts and as a valuable source of easily retrievable, primary material, a master index of uniform entries from each volume was developed after the transcripts came out of the typewriter and landed on the editor's desk. Dr. Henry Vaux helped in setting up the broad areas of subjects to be included, and as entries were

added, the Forest History Society at Yale became interested. At present the development of the index is a cooperative enterprise between the Oral History Office, the Forest History Society, and the U.S. Forest Service. A master index of uniform headings from each volume is available at the Oral History Office and at the Forest History Society.

By-products

One frequently finds that the oral history process is a catalytic agent in the world of research. First, it stimulates the collection of personal papers and pictures which, while valuable during the interview in developing outlines and chronology, are later deposited either with the transcript in Bancroft Library or with related papers in another repository.

Another happy by-product comes from the more literate who are motivated by the interview to do further research and writing for publication. Thus, Paul Roberts is currently writing an entire book, complete with all the documentation he can locate, on the shelter belt, its whys and hows. Ray Marsh is meticulously combining both writing and recording in a painstaking, chapter-by-chapter memoir which will cover his earliest reconnaissance days, the administrative posts in New Mexico, the fledgling research branch, and his work with Congress; his stories of those earliest years have already appeared in American Forests. Tom Gill, fortunately frustrated by the brevity of the interviews, which were condensed into the short travel schedule of the interviewer, is writing a more comprehensive treatise that will no doubt be unique in this or any other forest history: Tom Gill on Gill and international forestry.

Also, there is the self-perpetuation phenomenon-- oral history begetting more oral history. The interview with National Park Director George Hartzog has led to serious efforts on the part of the Park Service to establish a regular annual interview with the Director-- not necessarily for publication. Also under consideration is a Service-wide plan for oral history interviews of all its major leaders, which could serve as a continuation of the series conducted by Herbert Evison in the early 1960's.

Ed Kotok did not live to see the finished series. Just as Lee Kneipp never saw his finished manuscript, and Chris Granger's final agreement, covering the use of his manuscript, was found still unmailed on his desk after his death. All other contributors, however, were able to devote hundreds of man hours to the reading, correcting, and approving process required in finishing a manuscript. Although Ed did not get to read and approve his own transcript, all who knew him will agree that the series stands as one more symbol of his propensity for plunging in where few have tread before.

(Mrs.) Amelia R. Fry
Interviewer - Editor

UNIVERSITY OF CALIFORNIA
SCHOOL OF FORESTRY
AGRICULTURAL EXPERIMENT STATION

March 20, 1964

BERKELEY 4, CALIFORNIA

Mrs. Amelia R. Fry
Regional Cultural History Project
486 General Library
Campus

Dear Mrs. Fry:

The significance of the proposed project for securing information from certain selected people long associated with the development of the U. S. Forest Service rests on two facts. On the one hand, there are a small number of men still alive whose personal experience and memory covers virtually the entire history of the growth and development of the Forest Service since 1905. If we are to secure the best possible insights and understanding of the history of the Forest Service as a conservation agency the recollections and mature viewpoints of these men who were associated with the Service throughout their careers would provide unique and invaluable source material. The time remaining during which this information could be collected is obviously limited. A second justification is found in the fact that to date there has been no comprehensive historical evaluation of the role of the Forest Service as a conservation agency. Ise has published a critical history of National Park policy under the sponsorship of Resources for the Future which serves as an initial evaluation of the National Park Service. About 1920 Ise published a study on forest policy but that is obviously now confined to only a very small part of the significant history. A series of ^{inter}views such as are suggested in the present proposal could provide both new source material and the inspiration for a critical historical evaluation of the Forest Service.

The results would be of the greatest importance to the field of forest policy. The Forest Service pioneered both the articulation and the implementation of the concepts of sustained yield and multiple use as policies for natural resource management in the U. S. It instituted numerous innovations in the organization and administration of programs of handling federally owned resources. It developed on a large scale new techniques for cooperation with state and local units of government in such matters as fire protection and landowner education. It pioneered in a number of respects in the development of research as a functioning guide to operational policy of the government. Each of the contributions just enumerated are of the greatest possible significance for forest policy and for important implications going far beyond the natural resources field. The project here proposed would throw much light on the way in which each of the innovations noted above developed and would contribute greatly to our understanding of them.

Very sincerely yours,

Henry J. Vaux
Dean

INTRODUCTION

Walk into any gathering of foresters and say, "International forestry?" and the in-unison response will be "Tom Gill." From the inception of the interview series on the history of forestry, it was clear to all, and recommended by many, that Tom Gill should be interviewed if we included international forestry as a topic.

In mid-July, 1964, Mr. Gill sat down with the tape recorder and this interviewer in his Massachusetts Avenue study in Washington, D.C. On the wall hung a photograph of the father of forestry research, Raphael Zon, inscribed, "To Tom Gill, a kindred spirit." Above his large desk was the original painting which had been created to illustrate one of his adventure stories in the Saturday Evening Post. Comfortably ensconced in roomy chairs near the windows that overlook the Avenue, we conversed informally, Gill marching out his thoughts one after the other, as if he had been over this in his mind times before. And indeed he had.

Like so many men who lead colorful and often exciting lives, he talked quietly and unflamboyantly -- a stream of distilled information topped here and there with a sardonic phrase. He discussed not only his role in the development of forestry here and abroad, but the contributions of others who were to be interviewed later. Such counsel was to prove invaluable later as the interview series progressed.

During the next week we tape recorded two more conversations about an hour each in length, and the transcript of the three sessions formed the basis of the attached manuscript.

"Formed the basis" is correct because during the process in which the interviewer rough-edited the transcript, it seemed more and more like a teaser for a more comprehensive story. It was too short and deserved to be expanded in every section. I wrote Gill and told him so, suggesting that this could be used as a framework from which he might develop a book length autobiography. His response was hopeful.

"Who knows?" he wrote on May 29, 1968. "One of your troubles is that you are most persuasive."* That particular trouble is not yet acute enough to produce results from Gill, but when he received the transcript in the mail in June, he found the same frustration in reading through it and asked for "enough time to thoroughly revise the present draft . . . [after] resisting an understandable impulse to commit hari kiri"

*See appendix for letters.

The version he returned -- which is the version herein presented -- preserves nearly all of our interview and adds information, answers a few additional questions I had sent to him, clears up chronology, and here and there even inserts a "question" from me to which he then wrote the answer. Later he dug out the pictures, a complete set of which is contained in the Bancroft Library copy and negatives of which are filed in the Oral History Office at UC, Berkeley.

The rich volume of Gill on Gill may yet be written. But until then, this stands as a full but preliminary statement of his life in the worlds of forestry, international development, and free lance writing.

Amelia Fry
Interviewer

25 July 1969
486 The Bancroft Library
Regional Oral History Office
University of California at Berkeley

FORESTRY'S
AMBASSADOR
WITHOUT
PORTFOLIO

•
By JAMES B. CRAIG

ADVENTURE has been the constant companion of world forester Tom Gill, the executive director of the Pack Forestry Foundation, whose career bears witness to the fact that life need not be uninspired and uninteresting for those who are willing to live it to the hilt.

With a World Forestry Congress scheduled in Seattle this August, this seems an ideal time to review the work of forester Gill, one of a small band of 50 Americans who have taken the forest conservation story to many countries since World War II. Of these 50, Gill is perhaps the best known, and it was not by accident that Forest Service Chief McArdle referred to him as "our forestry ambassador without portfolio" when the Pack forester received Mexico's highest decoration for service to that country. And this is only one of many world-wide honors that have been conferred on this much-travelled forester, who has devoted much of his life to "forest and conservation education." Today, Tom Gill is generally regarded as the most accomplished forester in America.

Forest ranger, tropical explorer, flyer in World War I, educator, and author, Gill wrote his first story while snowed in on the summit of the Wyoming Rockies. Since then, he has lived in many out-of-the-way places of the world, from the Equator to the Arctic Circle, and has seen some strange happenings.

"In years of knocking about on several continents, I have been involved in floods, forest fires, snow-blindness, and army ants," Mr. Gill says. "As an innocent bystander, I weathered two untidy revolutions; I've camped in the shadow of Mayan temples and had my train riddled by a covey of lighthearted bandits. I've known the joy of slopping about in a sinking boat, finally to crawl up on shore in the low, pestilential delta of the Orinoco, faced with the cheery task of cutting my way through the jungle with a machete. Most of that trip we lived on a strictly reducing diet of crocodile tails and iguana eggs in various stages of ripeness. And if you've never eaten

an iguana egg dug from the steaming delta sands, you don't know the meaning of the word 'racy' as applied to food. I've perspired through a long afternoon while a herd of wild pigs dared me to come down from my carefully-selected mahogany tree, and I've slept out in the snows with dog-teams when the thermometer nose-dived to forty below and the northern lights sounded like riffling a deck of cards."

As a flyer in World War I, Tom Gill belonged to those early birds who got their training on the type of planes now remembered as "sewing machines." Later, as a pursuit pilot, he was placed in charge of flying at the largest school of aerial gunnery in the world. The war over, he took a rickety plane down into southern Mexico, where he flew over unexplored country and made the first aerial maps of tropical timberlands. The routine of daily flight over the endless jungle was broken finally by a forced landing, a long way from base, with the subsequent loss of one of his party by a poisoned arrow in an attack by Indians.

Tom Gill's bent for adventure was shaped early in life. Although born in Philadelphia in 1891, his roots were in Texas along the Mexican border. "My father, a former rancher, must have been a tremendously exciting person to my childhood," he recalls. "Rio Grande, Pecos, Billy the Kid, Geronimo—they were names of strong alchemy to me, and my magic carpet was a many-colored serape my father carried in northern Mexico many years ago."

By the time he graduated from the University of Pennsylvania, Gifford Pinchot's colorful forest rangers were already making an appeal to the public imagination, and it is not surprising that Gill went on to Yale, where he received a Master of Forestry degree in 1915.

While in college, Gill tried some fiction and magazine writing. Some of his earlier efforts were published in *Adventure Magazine*, and an article about a coyote finally put him in the slicks. Raphael Sabatini was

doing his famous serial on "Captain Blood" for *Cosmopolitan* about the time that Editor Ray Long of that magazine took the young forester in hand.

Long admired the legitimate western flavor Gill injected into his writings, but he was ruthless in eliminating the young forester's efforts to put across a "conservation message" in his work. "By the time Ray got through with those early stories of mine, the only forestry or conservation that would be left was the log on which the heroine happened to be sitting," Gill ruefully recalls.

While heartless in squelching Gill's early efforts to "educate" the public, it was probably this veteran editor more than anyone else who encouraged Gill to keep writing. The result since has been more than 50 magazine articles and over a dozen novels, all serialized in top-flight magazines, all translated into seven or eight languages, and five made into motion pictures.

When Gill first became an assistant forest ranger in Wyoming in 1915, his first boss was H. N. Wheeler. When the new assistant walked in the door, Wheeler told him, "You're in charge here. I've got a special job to do," and promptly left for other parts. By the time World War I came along, Gill had become a full-fledged forest ranger and had lapped up a lot of valuable story material in such places as Deadwood, South Dakota, where the spirits of Deadwood Dick, Wild Bill Hickok, and Calamity Jane were still very much alive to the young writer.

Following an exciting series of adventures as a pursuit pilot in the war and the South American exploration, Gill settled down briefly as director of educational activities for the Forest Service.

The Pinchot crusade spirit was still strong, Gill recalls, and the men of that very early group were as memorable and diverse a gathering as one is ever likely to meet. One thinks of Wallace Hutchinson, Coert
(Turn to page 41)

Forestry's Ambassador Without Portfolio

(From page 21)

du Bois, Whiskey Highball Kent, and many others. "Everyone rolled their own in those days, and I recall that E. T. Allen sketched the design of the Forest Service shield on a cigarette paper at one of the staff meetings. They were individualists, who deferred to no living man, yet held together by an unshakable belief in the high destiny of forestry and in the public value of what they were doing. Years later, Hugh Bennett was to kindle that same magnificent spirit among the men of the Soil Conservation Service."

The late Ovid Butler, executive director of The American Forestry Association, weaned Gill away from the Forest Service in 1925 and put him to work as associate editor of what was then *American Forests and Forest Life*. Gill has always admired the educational programs of the association, and he developed a warm affection for Mr. Butler, but he confesses that he never liked the regimen imposed by meeting the deadlines of a magazine. "You never feel that you are quite on top of the world when you're involved with a magazine," he told us. "In the fond belief that everything is under control, you pack a bag to take off for the Caribbean, and instead, you find yourself sweating out a deadline. No, it's too easy to become a slave to a magazine, and that kind of slavery wasn't for me."

This was a situation that Mr. Gill soon remedied. In 1926, the Charles Lathrop Pack Forestry Foundation, the first privately-endowed forestry foundation in the history of the world, was looking for an enterprising secretary, and Mr. Gill filled the specifications. During the initial period, work was focused largely on individual fellowships to create leaders in forestry by giving men of promise further training. Today it is a source of satisfaction to Gill to realize that practically all of these men have become leaders.

By 1937, when Randolph Pack succeeded to the presidency, the

foundation began to expand its spheres of interest. Pack believed that effort expended in behalf of foreign forestry would create both good will and future markets for America in years to come. Gradually, the work of the foundation was expanded to include Latin America and the Far East. It helped to create the United Nations Food and Agriculture Organization; it helped the Department of Defense prepare a forest law for Japan, and it helped the United States State Department in formulating a forestry policy for Formosa.

In this expanding effort, Gill was the chief artisan, and perhaps the outstanding program of all has been the foundation's efforts in helping to establish The Instituto Mexicano de Recursos Naturales Renovables, which has become a center of conservation for Mexico.

Tom Gill and his foundation have endeavored to sell the "integrated" approach to land management, with multiple use as one of the tools.

Mr. Gill is one of those who believe that the fundamental need in conservation for this or any other country is a unified program that stems from dealing with all the natural resources of a region as a single indivisible whole. "It's hard," he says, "to overemphasize the importance of recognizing that each resource depends on one or more of

the others, and that considering the human use of any area, the interdependence of these resources must never be forgotten. Failure to embrace this 'panoramic' point of view in managing resources has resulted in much waste of money and the loss of soil, water, and forests."

Across the years the Pack Foundation has maintained a major interest in the tropics, and Gill has become one of the world authorities on tropical forestry. A three-year study of the Caribbean region resulted in his authoritative work, "Tropical Forests of the Caribbean."

The tropics, Mr. Gill says, represent the greatest challenge and opportunity to the forestry profession. The tropical forest is the busiest wood factory in the world—a factory that provides millions of people with food, clothing, and forest products. Yet, despite the fact that here is the greatest potential producer of cellulose, chemical products, and medicines in the world, this field has scarcely been tapped, and no scientific group of people on the globe is quite so isolated as are those laboring in tropical forestry. It was to help overcome this professional isolation that Gill helped create the International Society of Tropical Foresters, an organization composed of the world's leading tropical foresters.

As the years have passed on, Tom



In foreground, from left: President Garcia of Philippines, Tom Gill, Carlos Fernandez, vice president of Nasipit Lumber Company, Inc., A. de las Alas, president of Philippine Lumber Producers Assn., Inc., and Florencio Tamesis, former Philippines chief forester

Gill has indeed become a sort of forestry ambassador without portfolio, a "trouble shooter" for forestry all over the globe. For example, when the Philippine people recently wanted somebody to "really lay it on the line" to them for the mismanagement of their resources, they called on Gill to give them the business. Gill did so, and minced no words about it, and the grateful Filipinos heaped praise upon him for giving them a badly-needed shaking up.

With the Pack Foundation now planning to liquidate its assets and disband, Gill candidly admits that this will leave a gap that some organizations should try to fill. "A privately endowed foundation can do things governments can't do," he explains. "When a quick grant is needed for a worthy study or publication, a foundation can step in promptly and plug the hole. In the past, the Pack Foundation has piloted a number of projects which, once their value was established, were taken over by government or industry. The American Forestry Association has done that type of thing on the domestic front—things the government can't do."

As the foundation approaches the end of the road, Gill also looks back somewhat wistfully at the days just after World War II when Lyle C. Watts, Henry Solon Graves, Walter C. Lowdermilk, E. I. Kotok, and others were working so hopefully with representatives of 16 other na-

tions for establishment of the FAO. John Boyd-Orr, of England, had issued his famous war cry to the effect that forestry represented the perfect vehicle that would help draw the peoples of the world more closely together, and foresters were working with might and main to make that a reality.

Advice for the prospective young forester of tomorrow with an aptitude for languages? The world is rapidly becoming smaller, Gill replies. Ideas today need transporting as much as anything else. An excellent linguist himself, Gill stresses that young foresters going to other lands should first learn the language. They should avoid segregation like the plague, roll up their sleeves, and work not with the striped pants group, but with the people out on the land.

"Chief Watts gave world forestry real encouragement at a time when it was most needed," Gill said. "It is hard for us here in America to realize the impetus given to foreign forestry movements when an important officer of the Forest Service shows a sincere interest in their problems. The forestry movement in Mexico was given a great shot in the arm by Chief McArdle when he visited that country not long ago."

The final answer to all these problems, Gill stressed, is education, a process that is often heartbreakingly slow but for which there is no substitute. Progress has been made; more is required. But today finds the people

of many foreign countries most receptive to friendly American foresters and the woods industries now moving into those nations are not only being well received but are also doing a first-rate job of managing renewable resources wisely, he added. "Actually, they are doing a much better job abroad than in many of our states today," Gill said.

Working in foreign forestry is "a two-way street," Mr. Gill stressed. Americans can learn much both from those countries that are in advance of our own in forestry and from those less fortunate. Sweden, for example, is a better example of democracy at work than the United States, in Mr. Gill's opinion—a nation with high ideals, less conflict of interest, and old enough to have discarded many predatory ideas. But even in the undeveloped nations, Americans should never mistake lack of education for lack of intelligence.

"The Creator did not give any one nation or race a priority on intelligence, creative ability, or shrewdness," he averred.

When the Mexican *vaquero* describes someone who is all man, "*un hombre y medio*," he calls him "a man and a half." Colleagues say this description fits Forester Gill. But even so, Tom Gill hasn't yet had time to do half the things he wants—especially in tropical forestry—and the list of "Things To Be Done" in his upper right-hand drawer will keep him on the jump for another decade.

TOM GILL CHRONOLOGY

(from Who's Who, Volume 30, 1958-59,
p. 1034)

Author, foundation executive; born in Philadelphia, January 21, 1891, son of John Alexander and Clara (Lex) G; B.A., University of Pennsylvania, 1913; M.F., Forest School (Yale), 1915; Doctor Honoris Causa, University of Andes, Venezuela, 1953; married Vivian Perry, Dec. 31, 1918. Assistant instructor of forest mensuration, Yale Forest school, 1914; timber estimator, Kaul Lumber Company, 1915; assistant ranger, U.S. Forest Service, 1915, forest ranger, 1916-17, deputy forest supervisor, 1920-21, forest supervisor 1922, in charge of forest service educational activities, 1922-25; associate editor, American Forests and Forest Life Magazine, 1925; executive director, Charles Lathrop Pack Forestry Foundation since 1952, secretary of Forestry Foundation since 1925.

Served as 1st Lt. in Air Service, U.S. Army, World War. Trustee, Forest Community Foundation, 1931-36. Past vice-president, American Forestry Association; honorary member of Society of Mexican Foresters; member of Timber Conservation Board (advisory committee), Soc. American Foresters (fellow, ex-chairman, committee on international relations), Yale Forest School Alumni Association (ex-vice-president). Fellow, Oberlaender Trust, 1936; trustee and member of William Alanson White Psychiatric Foundation, 1937-45; member publications committee for psychiatry, Journal of Biology and Pathology of Interpersonal Relations, 1937-45; member of interim committee of managers, Washington School of Psychiatry, 1937-45; special adviser on forestry, United Nations Conference on Food and Agriculture, Copenhagen, Denmark, 1946; adviser on forest policy for Japan, 1951, Formosa, 1952, 1956. Adviser to American delegation, UN Committee on Food and Agriculture, Washington, 1948-49; Rome, 1955; delegate of U.S. government to 3rd World Forestry Congress, Helsinki, 1949; delegate to Inter-American Conservation Conference, Denver, 1948. Chairman of FAO Committee on Unexploited Forests, since 1947, American delegation of FAO Conference on Land Utilization in the Far East, 1951, Far East Forestry Commission meeting 1952. Made first forest survey, party aerial, of tropical forests in Carribean region, penetrating undiscovered sections; made first mosaic aerial map of U.S., 1919.

Chevalier, Merite Agricola (France). Awarded Schlich Medal of the Society of American Foresters, 1954. Member of Pacific Science Association (secretary for committee, 1948). Clubs: Explorers (N.Y.); Cosmos, University (Washington). Author books including: No Place for Women, 1945; Land Hunger in Mexico, 1951; compiler (with E.C. Dowling) of The Forestry Directory, 1943 and 1949. Contributor to publications. Home: 2800 Jenifer St. Office: 1214 16th Street, N.W., Washington 6.

TOM GILL - CURRICULUM VITAE

Honored by the Governments of France, Germany, Mexico and Venezuela for his work in international forestry and conservation. First foreigner to receive an Honorary Doctorate from the University of Venezuela in its 150 years' existence. Recipient of the highest honor given by the professional Society of American Foresters, and the "Diploma of Honor" awarded by the Mexican Institute of Renewable Natural Resources. Adviser on forestry problems to Taiwan and the Philippines and served with American and Japanese foresters in writing the forestry law of Japan, later promulgated by the Emperor.

Pursuit pilot during World War I and made the first mosaic aerial map in the United States to demonstrate its practicability as a method of survey. Later flew over the tropical region of Yucatan in search of mahogany and made the first survey of the forest resources of the Caribbean region which resulted in the publication of **TROPICAL FORESTS OF THE CARIBBEAN**. Appointed War Correspondent in World War II. Represented Latin America on the Forestry Commission of the Food and Agriculture Organization of U.N. and wrote its official report. Represented the U. S. on international commissions and World Forestry Congresses. Fellow, Society of American Foresters. Honorary Member of the professional forestry societies of Japan, Mexico, and the Philippines. Past Vice President of the American Forestry Association and Yale Forest School Alumni. Chairman of U. S. delegation to United Nations Conference on Land Utilization in Tropical Areas of Asia and the Far East (Ceylon).

One of the founders of the William Alansen White Psychiatric Foundation of D. C. Served as Trustee and Co-Editor of its publication. Member of the Interam Committee of Managers of the National School of Psychiatry. Author of books and articles on forestry, and novels of outdoor fiction, many of which were translated into foreign languages and several made into motion pictures. Short stories were included in the READERS DIGEST collection, and O'Brien's BEST SHORT STORIES.

Honors include Sir William Schlich Memorial Medal, the highest award given by the Society of American Foresters; the Fernow Award given jointly by the American Forestry Association and the German Forestry Society, for distinguished international service to forestry; Order of Merite Agricole by the Government of France; Medal for Civic Merit in Forestry (1st Class), by the Government of Mexico; Distinguished Service Cross (1st Class), from the Republic of Germany; and Medal of the VI World Forestry Congress (Spain).

President of the International Society of Tropical Foresters and Executive Director of the International Union of Societies of Foresters.

Clubs: Cosmos, International, Army-Navy of D. C., and Explorers Club of New York City.

Further details in WHO'S WHO and AMERICAN MEN OF SCIENCE.

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EDUCATION AND EARLY ASSIGNMENTS

Fry: Why don't you start by telling me where you were born, and about your schooling?

Gill: I was born in Philadelphia. My father had been a cattle rancher in Texas, where a succession of drought years left him with little more than a Mexican saddle and a six-gun. These he sold and bought a ticket to Philadelphia where he became an importer of wines and liquors--a circumstance which later brought me much prestige and bodily safety when my work took me into the land of the moonshiners in Alabama.

About all that my father retained from those Texas days was a knowledge of Spanish, which he tried to pass on to me. Meanwhile, my mother, who was of German descent, countered by speaking at home in German with the result that I was never very clear about either language.

I went to high school in Philadelphia, then to the University of Pennsylvania. My father had an annoying theory that if a boy wanted a college education he had better contribute something to it. So during my undergraduate years, I worked in a number of capacities. I was lifeguard on the Atlantic Coast; I was a tutor--no one knows how good or bad--in German; and I was general assistant to a survey crew in the forests of Pennsylvania.

A few appalling short stories, published in very small magazines, also added to my contribution to the education fund.

Fry: At what point did you become interested in forestry?

Gill: My chief interest lay in the fact that it dealt with a resource fundamental to America's standards of living and rapidly becoming depleted. That interest began when I was still an undergraduate. Forestry too had the allure of being a new profession in the United States and it seemed to many of us to have a long term future and very little past.

Gill: It promised also--a promise that it later did not keep--to keep one away from a desk. Those were days when they were cutting the forests so rapidly that men spoke of the probabilities of a coming timber famine--a famine which arrived later on, so far as many of the better woods were concerned. All those factors conspired to interest a number of us who were looking around for a profession at that time. Then, of course, the work of Gifford Pinchot came as an added incentive.

So I went to Yale, which in those days was one of the few schools giving a Master's Degree in forestry. It was a two-year graduate course and at that time the faculty consisted of five men, most of whom had been leaders in their fields.

In my last year, I took the Civil Service examination to qualify for a position as U.S. Forest Ranger, and while waiting for the results after graduation in 1915, I worked as a timber estimator in one of the lumber camps of Alabama. It was there that news got around that my father imported wine and distilled whiskey and my popularity became so great I was able to work in sections of the Alabama hills that were too unhealthy for other timber estimators.

Fry: Do you mean they were in bodily danger?

Gill: They had been shot at on more than one occasion, and almost always, if they left their horses while making surveys, those horses would be cut loose and the men would have to walk home. My father's vocation spared me all that.

After a few months in Alabama, I was notified that I had passed the Civil Service examination and was offered a position as Assistant Forest Ranger in Wyoming. Incidentally, I was told I had made the highest grade of all the contestants from all the Forest Schools. This gave me a warm feeling of accomplishment until I learned later that one of my own classmates had beaten me by one-tenth of a point.

Fry: Were you in Wyoming during the Grand Teton National Park controversy?

Gill: I was there before that, actually. I know the Jackson Hole country very well and, incidentally, I am now a member of a Committee of the National Academy of

Gill: Sciences that went to Jackson Hole a year ago to investigate the need for more research by the National Parks personnel.

If these National Parks people are to redeem their responsibility, they will need a great deal more research and knowledge concerning their environment. As of today, the Park Service is confronted by an impossible task imposed on them by Congress, and unless they learn the basic facts about their environment no one can tell whether they are actually carrying out the intent--which was vague indeed--of Congress, or whether they are maintaining the Parks in a manner which will safeguard them from the increasing number of visitors each year.

I worked for about a year and a half in Wyoming, helping administer a large timber sale, marking the trees that were to be cut, and measuring the timber sold. We were then up to ten thousand feet in elevation.

When winter set in, which it did in mid-September, we had to build our own cabin and then did most of our work on skis, as well as maintain a horse for the summer months' work. This we all did on the salary of \$91.66 a month. We lived under conditions of isolation which, so far as the United States is concerned, are unknown today. For when winter came, we were entirely cut off from the rest of the world, except for the telephone which most of the time was not functioning. We, of course, had no radio communication and the mail was a very intermittent affair.

After Wyoming, I was stationed in Colorado, where the Forest Service was trying to find out what types of land we had in our National Forests. To do that, the best way was to map the land from the top of mountains, so that we could distinguish between forest land, grazing land, and land over which agricultural crops had already been tried. It was a time of actually mapping in country where, so far as we could find out, very little survey work had been done.

So in the course of our work we named a number of lakes and streams as we went along. Most of the work there lay in examining the homesteads to determine whether they were bona fide ranches or mere pretenses in order to get possession of National Forest timberlands. Timber theft was a popular



Forest Ranger - 1916



World War I aviators. Tom Gill second from left.



World War aviation days. Tom Gill in center, at that time in charge of flying at Selfridge Field, Michigan, the largest school for aerial gunnery in the world.

Gill: pastime in those days. Public land conscience was a predatory type of its own and there were a number of mining claims made only for the purpose of later cutting off the timber. So as guardians of the United States' forests, we were cordially disliked by many of the ranchers who looked on the United States' timber and grasslands as legitimate plunder.

Meanwhile, the war clouds of World War I were gathering, and when war actually broke out, many of us became increasingly restive to get into it. At this point the Forest Service adopted a rather ambivalent attitude. Their policy was one of reluctance to break up an organization and allow men to leave for the Army, although most of the leaders within the Forest Service already were seeking and securing commissions in the Army.

I, myself, at last decided that I would leave the Forest Service with or without permission and one of the head foresters from the Denver office came up to dissuade me, reminding me that my work there of classifying the timberlands was of paramount importance--at least of more importance than an Army assignment. I was unconvinced, and years later I remember asking him if he really believed what he had said to me. He smiled, shrugged and answered, "When you're a member of a large organization, you have to go along with the organization's policy."

I consented to stay on until most of the classification work was finished, and at the end of that time the Chief Forester of the Region told me that I could leave for the Army without prejudicing my status within the Forest Service. I then went to an Officers' Training Camp and soon transferred to the ground school training flyers for the Aviation Corps in Austin, Texas. Here, on passing the ground school, I was sent to San Antonio, and finally won my wings as a pursuit pilot in what then was known as the Signal Corps. Most of the war years I spent at Selfridge Field, Michigan, first as an instructor in flying and later in charge of flying of the largest school of aerial gunnery in the world. It was during that time that I experimented in aerial mapping and made the first mosaic air map in the United States.

With the war over, there was little allure in the routine of Army life and, at my request, I was sent back to the Forest Service.

Fry: Which forest was that?

Gill: I was made Deputy Supervisor on the old Black Hills Forest in South Dakota, one of the first forests created within the National Forest system. It was also the most interesting of all the Forests, because a great deal of experimental work in silviculture had already been done a number of years before and the results of different types of forest management could be compared. As a matter of fact, much of the forest literature in those days had to do with work on the Black Hills National Forest. So I was fortunate to be sent there.

Fry: This was all after World War I?

Gill: Yes. After a year on the Black Hills, I was transferred to the main office in Washington, D.C., and was put in charge of the so-called "educational activities" of the Forest Service. That word "educational" needs a little defining. Actually, it meant public relations. It consisted in giving information to the press and to the public, supervising motion pictures having to do with the work of the Forest Service, and getting out publications. My Chief was Herbert Smith, a non-forester who had never, as a matter of fact, been on a National Forest. He had been a classmate of Gifford Pinchot and a man of exceptional ability who, before he retired, had earned the title of the "Grand Old Man of the Forest Service."

That was a heterogeneous group, looking back at the Forest Service personnel, as strange an assortment as had ever gathered together. There were men from all calls of life--ex-ranchers, politicians, college graduates, packers, Rhodes Scholars--all held together by a common ideal.

Many of the old-time Rangers could barely write and most of the Supervisors of those days were non-foresters. Even the technical men, that is, the forest school graduates, ranged between highly-competent, articulate men to poorly trained semi-illiterates. But the men at the top were uniformly outstanding. William Greeley, in my day, was the Chief Forester, and one of the keenest and most sincere men I have ever worked with. But among that strangely assorted group I can say one thing--never did I hear of a case of actual dishonesty in

Gill: connection with any of them.

I remember one of my old-time Rangers while I was on the Black Hills, a man named "Cap" Smith. He had been a soldier with Custer's group and luckily had been sent away on a special task a few days before Custer's men were annihilated. Cap had originally come out from the East. I don't know much about his past. No one did. I know that he always carried a gun and never sat down except with his back to the wall in any public room. But I remember that he had many an opportunity to close his eyes to some of the timber thefts that had gone on, and I can remember the head of one large lumber organization approaching him on the subject of a bribe. Cap listened quietly while the man explained the benefits that Cap might get from not being too careful in his examination of the timber that was being taken out of the forest. At last Cap said, "Well, I know every man has his price." The lumberman was delighted. Then Cap added, "Trouble is, I'm so God-damned high-priced you might just as well consider me honest."

TROPICAL FORESTRY WORK

Gill: It was while I was in the Washington office of the Forest Service that I got my first taste of the tropics, and of the magnificent tropical forests.

It happened in 1924, and came about in a queer, unpredictable way. A man came to my office and asked me if I remembered him. I did. He was Tracy Richardson. I had flown with him during the war but before that he had been known as one of the little group of men who sold their abilities with rifle and machine gun to any Central American revolutionaries who paid the highest price. They are as extinct now as the dodo but in their day they made bloody history in South America. It was Richardson who single-handed had captured a Central American town and held it until reinforcements arrived. He and General Christmas and Zebin, the Fighting Jew, had changed the pattern of governments in Central American countries in the days when manifest destiny made it possible for large U.S. companies to secure favorable contracts in the tropics by the simple expedient of hiring a few men like Richardson and engineering a revolution.

I remember Richardson as a quiet, soft-spoken man, but I had heard he could not go back to New Orleans because of having killed a man there. He died years later, I think, in a jail in Denver. A series in the defunct magazine Liberty ran an account of Tracy Richardson's life. Today he would probably be in the Congo, fighting for whatever side made the most attractive offer.

Tracy Richardson had looked me up because he wanted someone who knew about both timber and flying to go with him somewhere in Mexico. He first asked me if we had any photographs of tropical timber, then later he asked me if I would come with him. I was to take a boat out of Houston for a little port in southern Mexico, under sealed orders, not to be opened until I had landed. The port turned out to be Progreso in Yucatan, and from there I took a small boat up the river for two days, then a mule, and finally with a band of about twenty Indians got back



A camp in Southern Mexico. Baron Dorenberg to the left, Tom Gill in the center.



Bringing in wood samples for testing and identification in southern Mexico.

Gill: into the interior where I met Richardson, who was waiting for me. He had chartered a small plane, and we flew over some of that country mapping as much as we could of the forest areas, and then went back to the Indians on foot after getting into country where the plane was useless.

Fry: I'm interested in knowing how you made the aerial survey with conditions as primitive as they were down there.

Gill: Well, we had used the one-motor plane with the understanding that if the motor stopped we should pick out the softest-looking mahogany tree and try to land. Actually, a broken ankle in that country would have been just as lethal as a broken neck, because we never could have gotten back to civilization. It was the sort of survey I wouldn't make now for all the money in the world, but at that time I had finished with the war, and I knew only two things. I knew forestry and I knew how to fly. So we put the combination together.

Later on, as I say, we went back into the forest on horseback, with a group of Indians, and supplemented what we had seen from the air with what we actually found on the ground. And we made a fairly good estimate of it, as things turned out later, although we lost one of our Indians via the poison arrow route when we got into hostile territory. The Indians had lain in wait up on horizontal branches of the trees, as they do, and then as our friendly Indian came under they let him have it with a blowpipe or an arrow.

We also may have encountered a race of pygmies. I never saw them and I doubt that they actually existed, but some of our men came back with the news that they had stumbled on a small village of pygmy Indians, who were reported to be hostile and addicted to the pleasant pastime of taking shots at you with poisoned arrows. I strongly doubt the whole story, but it added to the growing reluctance of our own Indians to penetrate further into the forest. Finally, they told us they would go no further. They were afraid, they said, that the hostile Indians would circle back behind them and steal their women. I had seen their women and I could not feel very apprehensive on that ground, but since they wouldn't go any further there was no choice but to

Gill: return. That was the first time I had actually had experience in the forests of the tropics.

Fry: Around what location was this?

Gill: Chiapas, Mexico. One of the southern states. In those days, no one except the Indians had gone into that back country. It was unmapped, and parts of it had never been penetrated by white men, so far as we knew. Once all that country had been part of the great Maya Empire, and for days we rode past the remains of temples and walled enclosures. It must have been a thickly-populated country in those days. At Palenque, where I passed one night at the foot of a Maya pyramid, archeologists years later found gold and turquoise ritual masks. I came back from that trip with a report on the quantity and quality of the timber there, and the timber was ultimately sold. What happened to it later I never knew, but it was that type of rather rough reconnaissance and crude reports that the early buying and selling of timber depended on. Now, of course, it's entirely different.

Fry: Were you able to cruise as thoroughly as you would here in the United States?

Gill: Not nearly, and it really did not make a great deal of difference, for the commercial value of ninety percent of the species that grew there was still unknown. Only mahogany and cedar were considered valuable, and the waste in the use of that was appalling. I've seen boardwalks and fences made of beautifully-figured mahogany and thousands of cedar logs left to rot along streams where the water levels had dropped and stranded them.

In that type of cruising you rode along, keeping track of the distance and amount of timber for a certain number of feet on either side. Then you would caliper certain of the valuable trees to check on the diameter. We tried to get at least a one percent estimate and apply that by multiplying by one hundred. Of course, if you happened to be unlucky and went through some very bad timberland you'd come out with an under-estimate. If you went through some very good timberland and you didn't know that it was better than normal you'd come out with too high an estimate. So a great deal of the work had to be left to your own judgment. Yet it's rather amazing how

Gill: close some of those estimates came out when they were checked later with some of the more accurate methods.

In recent years, of course, the Mexican Forest Service has made excellent inventories of its own timber. They're finding out, I believe, that they've got millions of feet more than they thought they had. But at that time it was all in very early pioneer stage. It still has some early pioneer aspects compared with the United States, for in the tropics we still don't know, for example, how much rot exists in those woods. We don't know how much insect damage to allow for in making an inventory; and we're only beginning to find out the requirements of many species in securing reforestation after cutting.

Fry: Did you do this survey for a private company?

Gill: It was a private company that later dissolved. I've even forgotten the name it had. The title to the timber itself--and there were thousands of acres of it--went through a number of hands and I lost track of its ownership changes. After all, my job had been simply to go down there and find out how much timber there was and what kind. After that the capitalists took over and I lost interest. But I was interested in quite another aspect: What to do about the appalling waste of timber and the destruction of the forest itself, through cutting, fire and nomadic cultivators. I think some of the timber has been exploited since that time. Nowadays, of course, it is comparatively easy to get into that country. Where it took us weeks to get in and weeks to get out, you can penetrate it in hours now, provided you find a place to land your plane.

Fry: I see. Then you were on leave from the Forest Service to go down to Mexico. At this time what was your position in the Forest Service?

Gill: I was still in charge of the public information work.

Fry: Did the general market in mahogany develop?

Gill: Actually, there has been a demand for mahogany and Spanish cedar in Europe for several hundred years. The Old World has been exploiting these two precious woods for at least several hundred years. One of the reasons why they were precious, in addition to their beauty and ease of handling, was the fact that they



Aerial survey over Haiti. Tom Gill to the right.



Reconnaissance in Guatemala.

Gill: floated and could be taken down by streams to the sea.

Characteristics of tropical woods vary enormously and of course affect their commercial usefulness. You have in the tropics woods that are so hard they will bend a nail, and if you put them in the river to float them down to the mill or to the boats, they sink like stones. But mahogany and cedar don't do that. So for several hundred years, the British and Spanish and other European countries were exploiting mahogany wherever they could find it and bring it out.

But that meant only along the rivers. The result was that after a century of exploitation there was no mahogany nor cedar available for a mile or two on either side of the rivers. Beyond that, there might have been huge quantities of excellent timber, but inaccessible. Today, the market for mahogany has dwindled to almost nothing. Other woods that are inferior have been brought into the United States under the name of mahogany so that the species itself has fallen in value and in desirability.

But Spanish cedar still remains as one of the great woods of the world. It's a beautiful wood. In those days, we knew that there were innumerable other kinds down there, but we didn't know anything about them. For one thing, we didn't know how to season them. That whole picture is changing, though the problem itself still remains. When you haven't a high enough percentage of usable, marketable timber in a forest, it raises the cost of exploitation extravagantly.

That's where the United States is fortunate. Practically all of our timber is marketable. Here, you can ride for miles through forests of the same species, but not in the tropics. On one acre you may find one hundred different species and maybe only two or three trees are commercially valuable, and that raises the prices.

That early trip into the tropics was to influence all my later work in forestry. It impressed me with those two things that I have mentioned: the great potential wealth of the tropical forests and the enormous waste entailed in exploiting it. Our ignorance of tropical species was profound. No one

Gill: knew how much was there, what it was good for, or how to regenerate it. A forest, after it had been cut, usually was followed by an invasion of worthless species. It was that interest that made me resign, later, from the Forest Service and enter into a contract with the Pack Forestry Foundation to make a survey of the forests of the Caribbean region.

Fry: I'd like to get more information on that survey in the Caribbean region. Which countries were included?

Gill: It included all Central America, together with Cuba and Santo Domingo. Both of those islands had ponderable amounts of timber which they weren't taking very good care of. Central America itself had some magnificent forests. The survey, which covered three years, culminated in a book called Forests of the Caribbean. It gathered together, so far as we were able, all that was known about the forests of that region and how they were being treated. All of that material is now entirely superseded by better air reconnaissance and better land reconnaissance, yet it was the first effort ever made, I think, in the United States to evaluate what was going on in the forests that were right at their back door.

Fry: Was this to help these countries make better use of their timber supply?

Gill: No, it was primarily to give us the facts on which to develop knowledge which we should have in order to supplement our own U.S. policy--our domestic policy. Actually, it was part of the old economic problem of supply and demand of forest products.

But, although it was not the primary purpose of the survey, we were able to help some of the other countries in strengthening their government forestry and in doing what we could to stop the forest devastation that went on at an ever-increasing pace. We were especially interested in Mexico, and later on the Pack Foundation established an Institute of Natural Resources there and supported it for about eight or ten years. Proof of the usefulness of this Institute lies in the fact that after the Packs terminated their contribution, Mexican citizens and the Mexican government continued it with their own money. It's still active and has, as its Director, the leading conservationist in all Latin America--Dr. Enrique Beltran. That was one tangible result of the survey.

Gill: Since then, of course, there have been a number of organizations engaging in the problem of tropical forestry, and institutions have sprung up throughout the tropics, helping in the training and education of foresters and especially in research. One such institution is in Merida, Venezuela, where men from different republics in Latin America come for advanced training. Another training center is in Turrialba, Costa Rica, which formerly was under the directorship of Dr. Holdridge, one of America's greatest forest conservationists. Both centers are now training students from many Latin American republics. The U.S. itself maintains an institute in Puerto Rico, under the charge of our most renowned tropical forester--Dr. Frank Wadsworth.

But let me give you a little more background in answer to your question why we in the United States were interested in the timber supply of these countries. As good timberlands became more scarce here in the United States in the early 1900's, and even before that, some of our lumbermen began looking around outside of the United States for possible new sources of supply. Naturally, the first place they would look to was the Latin American countries, especially southern Mexico, northern South America, and the Caribbean region.

Inevitably many blunders were made in the purchase of timberland in those days. I have known of large areas bought for mahogany which did not have a stick of mahogany on them, and I used to say that more money was put into tropical timber by United States organizations than was ever taken out.

But this is no longer the case. Later some of these companies did employ foresters to examine those areas and report on their desirability. Their surveys, as I have said, were necessarily crude but were far better than nothing, and some of them employed aerial reconnaissance. The airplane, of course, was just in its infancy, and we always tried to supplement the flight reconnaissance by examination of selected areas on the ground. Today the ability of a plane to photograph and interpret is marvelously close and accurate, but in those days about all we could learn was a very general idea of the condition of growth. Mahogany was an exception because at a certain time of the year the leaves were of a color that would distinguish them from other tree species, so we could photograph a country and practically count the number of mahogany trees on a given area.

Gill: Now they can do much better, both as to species interpretation and as to the condition of the forest. That was particularly important when the investment of thousands of dollars depended on the accuracy of a report, because it would either justify the building of a mill and the construction of roads, or it would warn the prospective timber buyer that the amount, kind, and condition of timber did not warrant his buying it.

About that time, the Yale Forest School was beginning to build up a collection of tropical woods which at one time was probably the best in the world--at least in the United States. On my trips back into the tropical forests I tried, wherever I could, to send samples of the main species, together with samples of the leaves or flowers in order to better identify them. That meant, in many cases, cutting down a tree, or if we couldn't cut it down, hacking out some of the wood, shooting down some of the branches, and sending them back to Yale. My contributions to the Yale collection were necessarily very meager, but some of them involved unforeseen consequences. That was especially true in Haiti. The Haitian negro had brought over from Africa many of the old superstitions, and one of them had to do with the sacred quality of certain tree species similar to those that had grown in Africa. Those trees they wouldn't touch. If I wanted a specimen, I had to cut the tree myself, and on two occasions when I woke up the next morning I had no Haitians with me. They had all cleared out because the curse was on me, and they didn't want to share it.

There were other difficulties. Some of the species contained poisonous sap that temporarily blinded the cutters, unless they protected their eyes. And in those days, except for a handful of species, we knew very little about the woods we were coming upon and what they would be good for. Some that held high promise proved worthless later. Some caused severe skin irritations to the sawyers. But little by little tropical forests were being tested and we were able to extend the number of usable species. That process still goes on and is adding tangible values to the forests of the tropics.

Fry: In your survey of the Caribbean, did you find that some countries were further along than others in forestry practices?

- Gill: Yes, there was enormous variation. The British in Trinidad, British Guiana and British Honduras were doing splendid work. They were staffed with trained, experienced foresters. The Dutch in Surinam and the Americans in Puerto Rico were also doing effective work. Cuba, through the United Fruit Company, had tried to do something. And Mexico already had an established Forest Service and a long history of forest administration that deserved better governmental support than it got in those early days. In Cuba, I helped establish their first mahogany and cedar plantation.
- Fry: This was about when, middle Thirties?
- Gill: The early Thirties.
- Fry: Was there any connection at all with the U.S. Forest Service?
- Gill: Not officially. The Service had no authorization to spend money on foreign forestry at that time. But they did everything to be helpful. They made it possible for us to send logs of foreign timber species to the Forest Products Laboratory in Madison, for testing to see whether they were good for this or the other purpose. In those days, the Western Hemisphere hadn't even scratched the possibilities of its tropical timber, especially the chemical possibilities. And these are still largely unknown. But what we did know seemed to hold promise. Pyrethrum, for example, is a product of tropical woods, and curare is now used in medicine.
- Fry: I am trying to understand how internationally-minded foresters fared as a whole in the Thirties. There was at that time a large portion of United States public opinion which was quite isolationist.
- Gill: Yes, and many U.S. foresters, too, felt and still feel that work in foreign countries was of little help to them when they came back looking for jobs in the United States. Foresters, like all other human beings, must be primarily interested in the loaves and fishes and there was little incentive to prepare for foreign forestry work because appointments were few and there was little security in employment, even when you got it. A few Americans had gone into foreign forestry fields, but not many; and there was no formal way in which men could be prepared and

Gill: charneled into this foreign work. The Philippines, in the very early days, and later Puerto Rico, had taken a handful of American foresters, but beyond that there was little done, and that was one reason why the Pack Foundation undertook that Caribbean survey as one of its very early projects.

PACK FOUNDATION

Fry: I gather that the Pack Foundation had a pretty broad viewpoint.

Gill: It had. Their Education Board was made up of leading foresters, some of whom already had had international experience. Sam Dana, for example, had been at the First World Forestry Congress in 1926, in Rome. And later, as Dean of the Forestry School in Michigan, he had built up a center where many Latin American foresters came for professional education. Those World Congresses, by the way, helped make U.S. foresters more internationally-minded, but they only happened every six or seven years. About twenty of us had attended the First Congress, and about the same number attended the Second Congress, which was held in 1936 in Budapest, and was captured by the Germans.

Fry: What do you mean, they "captured" it?

Gill: The great bulk of the delegates who attended were Nazis sent there from Germany and from Austria, so the Congress recommendations were largely framed by those people and focused on increasing the prestige and power of German forestry. It was a steam-roller operation, but at the same time one had to admit that the Germans had made forestry a more important show than any other country in the world.

As a result of this Congress, they established an international forestry center to be located in Berlin. It was very effective, and during its existence produced an impressive amount of forestry literature. But, of course, when Hitler fell, it became one of the casualties of war. Meanwhile, during the last year of the war, the Food and Agriculture Organization had been created within the United Nations and included a Forestry Division which carried on many of the same activities the Germans had started. But that's a separate story.

Fry: Was the Pack Foundation unique in the United States?

Gill: It was unique in the forestry field in the United States, and so far as I know, in the world. It was a privately-endowed forestry organization and that alone made it unique.

Fry: When was it incorporated?

Gill: In 1930. Charles Lathrop Pack, the founder, had made a sizable fortune lumbering in the Lake States and later in the southern pine. After he retired, he conceived the idea of putting back into the forests some of the money he had taken out. He called several of us into consultation as to the best way to go about it, and to Henry S. Graves of Yale goes the credit for suggesting a Pack Foundation and a Pack Forest Education Board. Graves became Chairman of that Board, and I was a director of the Foundation.

Its broad objectives were, for the most part, educational although they took on different forms. Charles Lathrop Pack and his son, Arthur Pack, recognized the importance of the wild and cut-over land problem, for example, in northern Michigan, and made a four-year study under the direction of the University of Michigan to determine land-utilization trends. They made a second study in the Lake States. They donated a number of demonstration and research forests to various organizations, such as the Universities of Washington, Michigan and Yale.

In 1942, the Foundation authorized a study of educational methods being used in eastern and central states to bring about better management of farm woodlands. During its first years, the Foundation followed the educational policy of developing leadership within the profession, and this policy was carried out through a system of scholarship awards to foresters of leadership promise in different branches of the profession. It financed, as I said before, the Caribbean study and published the report.

Fry: There were other publications, too, weren't there?

Gill: There were a number of publications, most of which were based on studies made under the sponsorship of the Foundation.

In the early years, the work was carried forward largely by granting individual fellowships, but by 1937 emphasis was placed upon a series of studies

Gill: dealing with problems that could not well be undertaken by fellowships alone. These included studies of sustained yield in the Pacific Northwest, studies on farm forestry, and a number of others. During the more than thirty years of its existence it did much good, and among the leaders of forestry are many of those who received help from the Foundation. The former Chief of the Bureau of Land Management was a Pack Fellow, as was Henry Vaux, Dean of Forestry at the University of California in Berkeley. There were a number of other illustrious foresters: George Jemison, H.R. Josephson, of the Forest Service; A. Starker Leopold at Berkeley; H.J. Lutz of Yale; N.T. Miroff of Berkeley; and others. It was really an impressive record.

Fry: Is it true that among other things the Pack Foundation gave foresters training in non-forestry subjects, and also gave them further technical forestry training after they had already entered the field of forestry?

Gill: Yes, whether the men were already working in forestry or not, or whether they were just finishing their academic work, if they could qualify for help the Board felt that they were worthy of being given further experience. It might have been a student working on a thesis, or an older man well along in forestry who wanted to specialize in certain subjects, or a forester might want to see what was being done in Germany in a certain field and we would send him to Germany. We made most of our awards in the subjects of general forestry and industrial forestry, but awards were also made in fire protection, wildlife, ecology and technology. The emphasis was always on the quality of the man himself.

Fry: This interest, then, was in building forestry as a profession and seeing that professionally-trained men were made available?

Gill: To see that they were well trained. That was the objective, and there was pressing need for advanced training, in those days especially. There were very few technically-trained foresters at that time, and even forestry graduates had not been brought far enough along in much of their technical training. Standards varied widely in the forestry schools and some were very low. Men were being graduated who in no way measured up to professional levels. So we

- Gill: tried to supplement that by sending the more promising men back to school for a year or two, or sending them out to study somewhere else.
- Fry: Were Forest Education Board members largely academic figures in the Forestry Schools?
- Gill: I think Dana, Winkenwerder and Graves were the only academic ones. Beyond that, they were federal and state foresters, directors of experiment stations, and industrial foresters. They covered a wide range of interests and competence.
- Fry: Could you give me some idea of your impact--maybe how many foresters you were able to help this way over a period of years?
- Gill: They reached a fair number. We averaged six to ten men a year during the life of the Foundation, and we were particularly fortunate in the number of men who really emerged and became leaders in the profession. I remember noticing that of all the articles that appeared in a recent issue of one of our technical journals, over half of the authors were men who had been Pack Fellows. Of course, some submerged and never showed up again. That was inevitable. One, I remember, after receiving Pack help became a missionary in Japan.

But I think the important thing is that the plan proved workable. It proved that additional training paid off in terms of accomplishment and leadership. And leadership was sorely needed, and still is, for unless we have some articulate leadership, the foresters of tomorrow are in danger of becoming technicians, while the policy-makers will be chosen from other professions. One regrets that forestry can't continue to have that kind of support, as was given by the Pack Forestry Foundation. Government, of course, offers opportunities for post-graduate training, but it can't hope to weigh the quality of men or the desirability of projects as carefully and as objectively as did the Pack Education Board.

We need, today, some such organization for forestry, but to establish it requires money and trained staff. The Society of American Foresters is trying to create a foundation for professional forestry which some day may be a factor similar to the Pack Foundation, but that is going to take years to accomplish.

- Fry: I was talking to Paul Casamajor, the special assistant to Dean Henry Vaux at the University of California School of Forestry, and he mentioned that right now they are getting so many scholarships and financial assistance offers for their students that they can't find enough students to go around. That made me think that perhaps the outlook is a bit brighter for forestry.
- Gill: Could be. On the other hand, it could result in lowering standards, and sometimes these scholarships you speak of are too rigid in their requirements and a man may want to do something that doesn't fit into the established pattern. There's where it seems to me it would be helpful to have something as flexible as the Pack Education Board that could say, "This proposal may not fit into any existing pattern, but the man himself gives great promise. So let's give him some money."
- Fry: I see. Did you use some schools more than others for this?
- Gill: Yes, but that would only be because that particular school may have happened to have had facilities for training the men that others did not have. We sent a good many to Yale and a good many to Michigan: wherever we felt that the training in that specific subject would be best, we sent the men. In other words, we didn't care what school he went to, or even what country, provided he was able to get the right kind of training.
- Fry: What is the status of the Pack Foundation now?
- Gill: It exists now only as a legal entity. The Education Board was dissolved, and I retired.
- Fry: Were many American foresters working in foreign lands when you first began your work?
- Gill: Not many, except in the Philippines. Actually, America hadn't then thought a great deal about foreign forestry. I was fortunate in knowing most of the leaders who brought United States foresters and forestry to foreign lands. They weren't many, but they were a memorable lot. My first taste of foreign work, as I told you, was in tropical Mexico while on leave from the Forest Service, and when I joined the Pack Foundation my contract called for

Gill: half-time in the United States and half-time in the tropics.

Fry: Did you personally get financial support from sources other than the Pack Foundation?

Gill: At first I worked solely with Pack Foundation money. Later, I took leave from the Foundation from time to time and went on a number of foreign missions for AID [Agency for International Development], FAO [Food and Agriculture Organization], and for the U.S. Army. The U.S. Army financed my work during my stay in Japan, the State Department covered my expenses during several trips to Taiwan and to the Philippines. On the several occasions when I went as a delegate from the United States, the State Department, of course, paid for expenses, but the Foundation continued my salary.

WRITING CAREER

- Fry: You haven't mentioned that you also ride a third horse, which is writing.
- Gill: Yes, that third horse often threatened to run away with me.
- Fry: How?
- Gill: I mean that the necessity to meet publishers' and magazine editors' deadlines began to interfere with forestry commitments.
- Fry: When did you begin writing?
- Gill: While I was still an undergraduate, I began to write short stories, most of which never saw the light of day. But some of them did, and one was a story about a grizzly bear. I had never seen a grizzly, so I was not confused with any knowledge of just what grizzly bears did. However, the story was published by the Boy Scout magazine, which soon after suspended publication. That I look upon as a coincidence.

At the University of Pennsylvania, I won the sophomore prize for writing, but at Yale they kept us too busy for any extra-curricular activities, although I did translate several forest articles from French and German for members of the faculty.

During the early Forest Service days, and the war days, I wrote nothing. Nothing, in fact, until in Deadwood, South Dakota, in the long winter evenings, I began writing again, mostly short stories, and some of them with a Forest Service background.

Later, as Mexico and South America became more part of my life I began placing my locale in the tropics. While in Washington, Cosmopolitan magazine began running my short stories, and the editor suggested I write a novel. It serialized, became a motion picture--a very bad one, incidentally--and from that time on, for a number of years, I wrote one novel a year, all of them appearing as serials, some as

Gill: motion pictures, and practically all of them translated into several foreign languages.

Fry: Where were they all published?

Gill: Cosmopolitan, the American, Colliers, Saturday Evening Post. They also appeared in British magazines, and several were pirated by Latin American magazines.

Fry: Did you ever consider devoting yourself solely to writing?

Gill: No. I enjoyed writing, I enjoyed it immensely, but forestry--especially tropical forestry--was my chief interest. I suppose that, in part, was the result of the lure of the tropics that I have been talking about. It's a spell difficult to define, yet it certainly exists and has a force. Part of it, I think, is the allure of the unknown, and the uncertainty of the future of forestry in the tropics, and the knowledge of how intimately those forests are tied up with human living--much more so than in the Temperate Zone.

Fry: Were any of the novels best-sellers?

Gill: Just one, and for only a few brief weeks it was on that best-seller list. But several of the short stories were included in selections such as O'Brien's Best Short Stories, and The Reader's Digest collection of short stories. But with the establishment of FAO and the work on commissions and missions, I found no time for writing fiction. By then I had published over a dozen novels and a number of short stories, as well as three books on forestry. Looking back, I realize that in addition to the sheer pleasure of writing them and the financial gain they brought me, those novels and stories were the vehicles to bring me a number of friendships in many parts of the world--friendships that have endured to this day.

EARLY UNITED STATES CONTRIBUTIONS TO FOREIGN FORESTRY

Fry: Perhaps you can give an over-view of the early international activities in which United States forestry participated. For instance there are the World War I activities of the foresters in the Tenth and Twentieth Engineer Corps, and there are the World Forestry Congresses. Do you think the United States foresters really did have any influence on the development of forestry in other countries?

Gill: When we speak of United States influence, we have to remember that Germany and France led the world in forestry in those days. Yet, in some countries we certainly did have enormous influence. That was not so much because of a United States policy as because of the caliber of individual American foresters who worked there. They worked in more or less complete isolation, hampered by false economies, their profession made hazardous by changing governments and policies; but year after year, they worked tirelessly, widening the horizon of human knowledge of the world's most neglected resource, especially in the tropics. They were not many but they were a vanguard.

Most of the foresters working in foreign fields in the early days of the 1900's were in the Philippines, led by Major Patrick Ahern. He had learned forestry by ear as a follower of Gifford Pinchot, and he was a devoted conservationist until his death. One of my old bosses, Wallace Hutchinson, had been with Ahern in the Philippines, and it was there that probably the greatest of the early pioneer foresters worked--Hugh Curran. He was in the Philippines, teaching at the forestry school, when the Japanese invaded, and taking the faculty and a few students out into the forest, he managed to keep them alive and hidden until such time as conditions quieted down and he thought it safe to bring his little band into Manila to surrender.

When the United States troops reached the Philippines, there had already been a Spanish Forest Service, but it was never very active and confined itself solely almost to the sale of timber. But when the Americans liberated the Island from the Spanish,

Gill: they put it under a more efficient administration. Today, although the Philippines have some of the most magnificent forest in the world and some of the most devoted professional foresters, they are unable to do a great deal because of lack of public support and lack of finance. That was one of the reasons why I was sent down as a consultant for AID, to see what could be done toward arousing public opinion and helping the forestry movement.

Fry: What happened to Curran later?

Gill: He worked during his last years in Venezuela, where he went on working vigorously during his eighties, and he had an enormous influence on the whole forestry movement there. He died just a few years ago. He was, of course, much older than I and far more experienced, and I remember his warning me what to do and what not to do on my first tropical trips. I was leaving to go up the Orinoco, and I remember the last thing he said to me was, "You know, there's just no use letting your bones bleach on the banks of some tropical river." Yes, Curran knew far more than any of us about the tropical forests, but he had an almost pathological aversion to writing, and never left more than the barest outline of all the knowledge that he had.

In 1960, Henry Clepper and Arthur Meyer edited a book entitled, Six Decades of Forest Growth. I wrote the chapter, "America and World Forestry," which gives a fairly detailed account of our early foreign forestry activities. Yet among the few of us who are left who knew Curran, he will always remain the Grand Old Man of Tropical Forestry. He had a deep, abiding love for the tropics, a love that holds us all, whoever has ever worked there. They are a fading memory now--that group of men--but in their day they left their imprint and they laid out the course that others have followed.

So to answer your question more specifically, the United States had had a dominant role in influencing forestry in the Philippines. It has also had an important role in Mexico and Japan. In Mexico, in the early days, the influence came largely from the French, and in Japan from the Germans. But during the MacArthur occupation, the Americans took over and I think have left an abiding influence on Japanese forestry. That was due to the inspiration of Colonel

Gill: Arthur Spillers, later of the Forest Service, who conceived the idea of a conservation section within MacArthur's army.

Fry: Is there anything in the Philippines' history which is relevant to our forest issues in this country? For instance, how much public control do they have over methods of cutting?

Gill: Theoretically, they had complete control over cutting on their national forest lands. Practically, it hasn't worked out because the Philippine Forest Service has been too small and too poorly supported by funds and by public sentiment to do effective work; so the result is that, in spite of a small dedicated and able group of professional foresters, there has been and I think still is an enormous amount of theft and destruction of timber in the Philippines. That, as I say, was one of the reasons AID sent me over to make a report on forestry conditions about ten years ago. My report may have helped to some extent, but not a great deal.

They still need what we needed in our own country, years ago. They need to have public sentiment sufficiently in back of the forestry movement to say, "We won't tolerate continual loss of good timberland, and worse still, of the good soil which is being wrecked by erosion and exposure to the sunlight and rain."

Fry: But they do have forestry laws?

Gill: Yes, they have laws, just as most tropical countries have forestry laws, and often very good ones. But laws of themselves do nothing unless backed up by police power and by public opinion. Those laws get no further than the paper they're written on. They're not enforced and they can't be enforced because they haven't the backing of the public behind them.

After we took over Puerto Rico we did very little in the forestry line for some years. Previously to that, there had never been any forestry practiced. The United States Forest Service then established a national forest and put it under administration. Today in Puerto Rico we have one of the most advanced training centers in the tropics, under the Institute of Tropical Forestry, which belongs to the United States Forest Service. The man who, to my mind, is the

Gill: most competent tropical forester in the United States, is Director of the Institute--Dr. Frank Wadsworth.

Fry: Where do the men come from who attend the Institute?

Gill: Chiefly from the Far East, although there have been a number of Latin Americans. The State Department has something to do with their choice. Of course, it's hard to tell how much influence that will have when those men go back home, but I think the influence could ultimately be very great. So I think that can't fail to spread the influence of United States forestry to foreign countries, and it's an influence that's not political. It's more basic and more human and should endure long after political ideologies are forgotten.

Fry: Did we do anything for Cuba after the Spanish-American War?

Gill: Not for quite a while, but for a time our influence was very strong there. I went down to Cuba in 1931 for the United Fruit Company and started their first mahogany plantations in Oriente Province. Cuba had been practically denuded of mahogany and cedar for hundreds of years. Cuba still has a Forest School and a Forest Service, but we can learn very little about it these days.

Fry: Were there any attempts to organize international forestry meetings in those days?

Gill: The first I can remember in which the United States participated was in 1905. That came as a result of Gifford Pinchot, who had conceived the idea of promoting international cooperation in forestry as one way of reaching closer rapport between the nations. He persuaded the United States government, which was in effect persuading his friend, Theodore Roosevelt, to call a meeting here in Washington which was attended by U.S.A., Canada, and Mexico, and was called the North American Forestry Conference. It had few tangible results, so far as I know, but it did strengthen the hand of the foresters of Mexico and Canada.

Pinchot himself was thinking of the broader implications than simply forestry itself. His belief was that the tensions leading to world conflict might be decreased if we could get the nations

Gill: of the world to cooperate in the preservation of their natural resources. He pointed out that most wars are waged over natural resources, and he felt if he could get a cooperative effort established among the nations, that would increase the available resources, we might be able to lessen the tensions caused by scarcity. He firmly believed this all his life. It was his dream.

And in 1949, when he was seventy-nine years old, he proposed a conference to President Franklin Roosevelt just for that purpose--a world conference on conservation. Roosevelt accepted the idea enthusiastically, but it wasn't until after Pinchot had died that the conference itself was held. It was held in New York and was a very sorry show. It omitted the very heart of Giffort Pinchot's purposes. All vitality had been drained out of it, and nothing was accomplished. Pinchot's dream had been lost in the morass of dull officialdom.

Fry: In the whole picture of foreign forestry in the Twenties and Thirties, do you think that the reconnaissance work of private U.S. companies in Latin America was America's largest contribution?

Gill: I'm tempted to say yes, until I remember Puerto Rico and the Philippines, where federal forestry had made immense contributions and in a much more orderly way than any private contribution. Of course, the forest industry had been long interested and had made many examinations of tropical timberland, but it was done privately and on their own, and of course in a competitive situation there was little chance of cooperation or of pooling information.

Except for the Forest Service itself, the United States government has never had any policy for foreign forestry. Through its AID, the State Department sent many foresters to work in foreign lands, but it was a haphazard, uncoordinated effort. AID had money and authorization and a marvelous opportunity, but they had no standards and, as a result, they employed some excellent foresters and some of the poorest. The Forest Service, on the other hand, was handicapped because their appropriations were solely for forestry in the United States.

Meanwhile, in Europe it was quite different. The French and the Belgians were very active, and the

Gill: Dutch had worked up a brisk trade in the foreign field, especially in the tropics.

Fry: You mean their governments?

Gill: Yes, the governments. The British government has been foremost in supporting foreign forestry. They had spent millions of pounds on forestry in India and other colonies. Perhaps the chief reason the British held onto British Honduras for so many years was the fact that it served as an important source of mahogany. As soon as mahogany ceased to be of economic importance, British Honduras became a liability rather than an asset. One of their governors told me that had it not been for saving face, they probably would have sold it to the United States or to some other country. But they did have a policy of regenerating their forests, just as did the Dutch and the Germans. The only places where we were doing anything in that respect, as I told you, was in Puerto Rico and the Philippines and a little in Hawaii.

Fry: The only place where all this information of the privately-sponsored investigations of foreign timber supply was brought together so that it could be used by the whole field of forestry, were places like the Tropical Plant Research Foundation at Yale?

Gill: Yes, and they were necessarily very limited. It was a small organization and had a rather brief life. I was its forester and made a number of surveys for them. The Foundation was greatly supported by the United Fruit Company and later received several grants from the Pack Foundation. Much of the information and some of the wood samples were put at the disposal of the Yale Forestry School during the brief period when Yale was interested in tropical forestry. Meanwhile, many of us who were employed by private industry were turning over material and information to places like Yale and Michigan.

I was helping, in a very small way, to build up knowledge about the tropical woods in Latin America, but men like S.J. Record and Robert Hess made more significant and permanent contributions. Most of us, when we returned, would prepare reports of the condition of the forest and gradually there was gathered a body of information from which, little by little, emerged a picture of the tropical forest resources in the Western Hemisphere.

Gill: In many cases we couldn't give complete accounts of timber volume because that was the sole property of the organizations that had sent us, but we could give an insight into conditions and species and the possibilities of regeneration and that sort of thing. And at last, in building all that together, you do get a fairly accurate mosaic.

More recently, such information is being collected by the Foreign Forestry Division of the United States Forest Service, but they, too, are somewhat handicapped in doing all this. We still have Congressmen who get up on their hind legs and demand, "But why spend money for something overseas? What's the matter with spending it on the good ole U.S.A.?"

Fry: Could you tell me whether in Latin America now they are following the more traditional methods of U.S. forestry? Or are they influenced a great deal by French, British and German methods?

Gill: It depends on the individual country, although we can say that for Latin America as a whole U.S. forestry influence is increasing. The British colonies in Latin America, such as Trinidad, British Honduras and British Guiana were, of course, exclusively influenced by British forestry, although to some extent they are taking over some of our own techniques. To my mind, British forestry leads the world, as far as the tropics are concerned. They have sent out excellently trained men; they gave their support at home, and although they were not very lavish, they did appropriate funds to maintain a staff and to do the necessary work.

At that time, U.S. foresters had very little to offer tropical forestry, because we had very little experience. The British had been working in India and other tropical countries for over a century, so their prestige and their competence were very great.

Some Latin American countries had been sending their young men to France for forestry training. In the Argentine and Mexico, I would say that, in general, American influence has been stronger than any other country, and this is increasing. Our influence in Mexico has been considerable, although Mexican foresters themselves are well trained and are working out their own problems. Our influence

Gill: in Venezuela is strong. Many Latin Americans sent their men to Michigan and Yale, and when they returned they naturally brought back much of the American tradition with them.

But I believe that with the increasing activity of international forestry in FAO, we are passing beyond the era when the influence of any one country dominates. We are becoming able to adapt the best practices of whatever country leads in that particular phase of forestry. Teams of foresters from different countries under FAO are gradually working out practices that take the best from different countries, and that, I think, is the chief contribution of international forestry. Technically, and I hope to some extent politically, it releases us from yesterday's bonds of provincialism and narrow patriotism.

I mentioned the Argentine and Mexico, but originally the French influence there was great. German influence was never very strong in Latin America, but it was in Japan. In fact, it has been said that the Japanese foresters, with their genius for imitation, took over everything from Germany except the climate.

Fry: When?

Gill: In the early days of forestry in Japan.

Fry: Before World War II?

Gill: Long before. They already had a well-established forestry organization and a comprehensive forest law, but when World War II brought enormous demands for timber, Japan was forced to cut its forests, except for some of those that were sacred. They still had an organization, after the war, but very little timber. The contribution of the United States to forestry in Japan is something the profession and the nation itself can always be proud of.

I think I told you that under the U.S. occupation a forester and soldier, Colonel Arthur Spillers, conceived the idea of creating a Division of Natural Resources, and the head of the forestry group was Lt. Col. Donaldson, a Syracuse forester. His job was to cooperate with the Japanese Forest Service in rehabilitating their forests, which had been so badly

Gill: devastated. Japan was beset by problems that the Japanese themselves could not solve, and Donaldson set up a program for inviting forestry experts from the United States to spend several months in Japan and report on their studies. It resulted in a body of forestry literature that the Japanese could never have had otherwise. It was, to my mind, the best example of U.S. technical aid to any foreign country.

I worked there under Donaldson, and my job was to revise the old, obsolete forest law, and the new revision was finally promulgated by the Emperor and became the guiding law for forestry in Japan. One of the most satisfying of all my international activities was this Japanese work. The Japanese themselves knew that their forestry future was at stake and they cooperated whole-heartedly. They trusted Donaldson and during the time he was there they completely changed forestry practice. We wrote for Japan a very Spartan forest law, but that was what the condition of the Japanese forests demanded and, as I say, after long discussion the Emperor finally signed it. It has been said that the MacArthur occupation was the most humane in military history and certainly the forestry aspects could not have been more humane or helpful.

Since then, a great deal of my later work was increasingly to do with representing the United States on commissions or at world congresses or working in Mexico, which had by that time become my second fatherland.

You spoke of international forestry organizations, and it didn't occur to me to mention one that a little group of us started about fifteen years ago. It is known as the International Society of Tropical Foresters. The purpose behind that was the fact that foresters working in tropical lands, speaking different languages, working for different governments, were largely in complete isolation one from the other. There was a definite need for some method of letting them know what meetings were taking place, who was working where, what discoveries were being made, what publications were being added to the body of tropical forestry literature. So the International Society began publishing a yearly list of its members which gradually grew to over four hundred, and several times a year publishing a News Note which gave information to tropical foresters that might be helpful. We also

Gill: were instrumental in getting positions for some of our members and in directing potential employers where to find the best men for particular work.

Fry: You're an officer in that organization, aren't you?

Gill: President, but the title itself means very little. I happen to have taken over the executive work from the start, and am still continuing it. And the Society itself is the only one which covers the tropical work in both hemispheres and, of course, on a non-governmental basis.

POST WORLD WAR II UNITED STATES CONTRIBUTIONS TO
FOREIGN FORESTRY

Beginnings of Forestry in the Food and Agriculture
Organization of the United Nations

Fry: You have spoken several times of international forestry. Did that begin with the United Nations?

Gill: In one sense it began long before that. It began in a very feeble way with the old defunct League of Nations. Under the League an Office of Silviculture had been created. It was a weak, ineffective affair, not many nations supported it, and its effect on world forestry was negligible. Then, after the League ceased to exist, the Germans, as I say, at the Second World Congress in Budapest, established an international Center of Silviculture. However dominated by the Nazis it may have been, many nations joined, and during its existence it made a number of excellent studies and published a very impressive number of publications. It was the nearest thing to an international approach to forestry that the world had yet seen. Then, with World War II and the collapse of Germany, of course it died.

Fry: Then the United Nations filled the vacuum?

Gill: With the United Nations came the Food and Agriculture Organization, and that was due to the inspiration of one man. His name was Frank McDougal, who arrived here in Washington while World War II was still going on. He was acting as adviser to the Australian government. I knew him very well, and this is the story he told me.

He was attending a dinner at the White House and the question arose as to what could be done to hold the Allies together when the war was over. McDougal said, "Mr. President, give the nations something to do. Give us something with which we can all whole-

Gill: heartedly join. Why couldn't we band together and wage war on hunger, which affects over half the peoples of the world?" Roosevelt apparently liked the idea and later the Hot Springs conference was called for just that very purpose, the purpose of creating a Food and Agriculture Organization under United Nations. Its objective was to raise the living standards of the world and primarily to feed the world's hungry people. To that end, they proposed to establish a number of sections, such as agriculture, fisheries, and others. But forestry was not included in the picture.

Fry: At this time, were you with the Pack Foundation?

Gill: Yes, with the Pack Foundation, but assigned to FAO during its organization period. Shortly after FAO was formed, a number of us decided that forestry should be included, that forest products are as important to feeding the nations of the world as other contributing factors.

I'll never be certain just what the deciding factor was that brought forestry into FAO. One story is that Franklin Roosevelt, on one of his trips to the East, flew over Lebanon and, looking down on the place where the famous Cedars of Lebanon had been, saw nothing there but arid desert. He decided then that something should be done on a world scale to prevent continuous forest devastation and the wrecking of forest lands. That may have been the reason for forestry being included in the United Nations.

But there's another story, and I can vouch for at least part of it. One of the delegates at the Hot Springs conference where FAO was formed was Anders Fjelstad, a Norwegian. He repeatedly urged the inclusion of forestry. Nothing was done, however, and FAO was formed with its sections on fisheries, agriculture and others, but not including forestry. Meanwhile, Fjelstad and others continued to point out how necessary forestry is to raising living standards, and contributing to the food supply of nations. Finally, one of the cabinet members brought the question up in a memo to Franklin Roosevelt. Roosevelt returned the memo with the longhand notation, "Yes, I believe forestry should be included in FAO." And with that powerful backing, forestry was in.



Col. Schenck, head of the Natural Resources Section in Japan, presenting me with a Tombill Certificate of Achievement



First meeting of the FAO Committee on Forest Development in the Tropics, held in Rome, October 1967. Left to right - Dr. Wadsworth, head of the Institute of Tropical Forestry, Puerto Rico; Dr. Robert Winters, U.S. Delegate; Tom Gill, Chairman of the Committee

Gill: But the new Division of Forestry and Forest Products was far from welcome. Already FAO had consolidated its other divisions and had allotted its budget. Now it was faced with the necessity of revising and curtailing, in order to make room for forestry.

Immediately, an interim commission on forestry was formed, composed of about twelve foresters from different nations of the world. Henry Graves was the chairman. He, at that time, was Dean Emeritus of the Yale School of Forestry. I represented Latin America, Russia was represented by Menshikov, and Fjelstad from Norway. Champion, one of the great foresters of the world, represented England, and Lyle Watts, then Chief of the Forest Service of the United States, represented the United States of America. It was probably the most distinguished gathering of foresters that had ever come together, and its purpose was to lay out blueprints of what forestry in FAO should be, how it should be staffed, how it should be supported, what its purposes would be.

After over a year of conferences, in which other foresters were consulted, the interim commission produced a document known as the Third Report To Governments.* This has been called the Magna Carta of international forestry, and to my mind it is one of the most important documents in all forestry literature.

Lowdermilk, one of the United States' best foresters then living, helped to frame the Third Report to Governments, but was dissatisfied with the lack of sufficient emphasis placed on the influences of the forest on streamflow, on preventing erosion, and other means by which the forests were of value in countries where the wood or the products themselves played little part. Accordingly, he wrote a memorandum which, so far as I know, was never published but which is, in itself, a splendid plea for the need for forestry as a means of protecting the soil.

When this Third Report to Governments was published, FAO allotted about one hundred copies for

*Third Report to the Governments of the United Nations, by the Interim Commission on Food and Agriculture, Washington, D.C., April 25, 1945.

Gill: distribution in America by the Forest Service. The chief of the Forest Service called me up and said, "What in God's name can we do with a hundred copies? We need thousands." I wired the director of the Pack Foundation and asked him for authority to publish twenty thousand copies. Immediately, permission was granted and we published that many copies, which the Forest Service then distributed. Otherwise, this publication, the result of almost two years of work by a number of the world's leading foresters, would have had no distribution at all. It would have been practically buried.

That, then, was the beginning of U.S. participation in forestry through United Nations. When FAO itself started, it rented a small place in Washington on Macgill Terrace and the entire FAO staff consisted of only about a dozen people. I headed the forestry group. With me was a Pole, a Russian, and a Canadian secretary. That was the forestry staff. Incidentally, the Pole, who I believe has since changed his nationality, is now one of the Deputy Director Generals of FAO in Rome, a very intelligent, competent man; not a forester but with a good forestry background, especially in forest products. So that, then, was the start.

Later, they selected a Frenchman as Chief Forester of the Division, and I went with him through Scandinavia and other countries in Europe, meeting with foresters and other governmental officials and acquainting them with the purposes of the forestry group and generally getting ourselves established. It was just after the war and conditions were grim in many of the countries. Norway had not begun to recover from the occupation and food was scarce, and I can remember in Paris walking in the morning toward the American Embassy and seeing French women fighting with the dogs over the contents of garbage pails.

A little later I was offered the post of Deputy Chief Forester in FAO, but preferred to remain in the Pack Foundation and devote what additional time I could to tropical forests.

Soon, FAO established headquarters at the Longfellow Building on Connecticut Avenue in Washington, and later a huge building was put at their disposal in Rome. Today, this small forestry beginning in FAO has extended enormously until there

Gill: are missions all over the world. FAO, to my mind, has been doing magnificent work. Probably S. Bevier Show* has given you a more detailed account of the FAO forestry activities.

Fry: I didn't get it in time from Show, but after he died Ed Kotok** reported what he knew of his brother-in-law's work.

Gill: I knew fairly well about it. My job at that time was to staff FAO with the quota of U.S. foresters, and on my recommendation they put in Show. He remained for several years and when they moved to Rome, he ceased being with them and went back to California. He was in his sixties at that time and had reached a retireable age. Dr. Morris Huberman was another U.S. forester who rose to the top ranks in FAO, and so did Dr. Haig, both of them first-rank American foresters to whom international forestry owes a great deal.

*Show, S. Bevier, "National Forest in California," typed transcript of a tape-recorded interview conducted by Amelia R. Fry, University of California, Bancroft Library, Regional Oral History Office (Berkeley, 1965).

**Kotok, Ed. I., tape-recorded interview on research, national forests, and FAO, conducted by Amelia R. Fry, University of California, Bancroft Library, Regional Oral History Office (Berkeley, 1965). In process.

UNITED STATES FOREIGN AID IN FORESTRY (ICA, AID)

Fry: But FAO was not the only agency through which the United States was active in foreign forestry.

Gill: No, there was a little forestry activity when the foreign technical assistance work started under President Truman, and large sums had been given to aid foreign governments.

Fry: Is this the Marshall Plan?

Gill: No, but it may have been an outgrowth of the Marshall Plan. It took the form of an agency at the State Department and changed names about every two years, which was probably a good idea after its record of international blundering in the forestry field. It was the International Cooperative Agency (ICA), then it became MAS, which represents something I've forgotten, and now it's AID, the Agency for International Development.

Part of the AID assistance took the form of sending foresters into foreign lands to help develop the forests, establish policy, and give advice in staffing foreign forestry associations and services. This they're still doing to some extent, and AID represents today the only governmental outlet that the American forester has in foreign fields. In other words, in order to export our know-how and our experience, forestry has to depend almost wholly on AID, and that has been a very poor show as far as forestry goes.

AID itself has never had any forest policy. Those who administer it do not know what the potentialities of forestry are and have never taken a great interest. AID's activities in forestry are shrinking year by year, which is something that the forestry profession regrets and has tried unsuccessfully to remedy. Some years ago, the National Academy of Sciences, which had been formed long years back to advise government on these very matters, advised AID to appoint a tropical forestry committee, consisting of the best foresters of the tropical world,

Gill: who could give them advice on what to do. Under the proposed agreement these foresters would give advice. They had no administrative powers.

I think the Academy needed about \$60,000 a year for three years to support this committee, at a time when AID was spending billions. But AID never saw fit to invest the \$60,000 which would have saved them a great deal of money and a world of blunders. The pity is that they missed the great opportunity to place the United States at the forefront of nations, insofar as a national resource policy was concerned.

Fry: How do you account for this lack of interest on the part of AID?

Gill: A number of reasons. One is that when AID or its predecessors was established, it was established on the basis of a crash program. They had the idea that they must show results within a year or two, and forestry would not be a very good medium for this purpose because it's a slow process, although not as slow as they thought.

At any rate, we have never been able to get forestry established on a high enough policy level in AID so that the voices of the foresters could be heard and listened to. The Forest Service has done its very best to backstop AID and to keep it from making costly blunders, and to see that it does something significant in forestry.

Fry: Is that one of the jobs under this relatively new post now in the Forest Service, an assistant chief in charge of foreign forestry? (I don't know the exact title.)

Gill: They have a Foreign Forestry Service, a division which, among other things, helps and counsels AID and other international organizations, and to the extent that they are able, they are doing a splendid work. They know foreign forestry needs, they also know the type of contribution that American foresters are capable of making. But they are badly stymied because of the fact that whenever they have to channel their activities through AID, they reach an impasse in the State Department.

Fry: However, in your article you mentioned that under the State Department the program of ICA included the

Fry: employment of about fifty foresters and that in 1960 a comprehensive policy was proposed.

Gill: Proposed and rejected.

Fry: I see.

Gill: If I were writing that article now, I'd probably say that thirty or maybe twenty-five foresters were employed. They're cutting the number of foresters steadily.

Fry: Is this because we've been so wildly successful in these countries that they don't need us anymore?

Gill: It's lack of interest on the part of the State Department and, as I said, when AID and its predecessors were formed it was from the standpoint of a crash program in which they could show instant results. Everything had to be geared to immediate returns.

Fry: You mentioned some administrative problem in AID.

Gill: Yes. In their administrative structure, forestry is listed as one of the minor products in their agricultural department, on a par with broccoli and other commodities. They had not the slightest conception of what forestry was about, and it was hopeless to get any policy changes made.

NATIONAL COMPARISONS IN INTERNATIONAL FORESTRY

Fry: How does our international contribution compare with the contribution of other countries?

Gill: Well, we could certainly do better. Russia and Germany are very active, and even Sweden has been doing some work in the foreign field. In this country, where there are sixteen thousand foresters belonging to the Society of American Foresters alone, we have an enormous potential which could be made available in foreign fields.

It's very true we haven't a great many foresters with foreign experience, but we have a sizable number. It is also true that our schools are not producing foresters for foreign work to the extent that they are in Europe. But it's the chicken and the egg-- we'll never have foresters with foreign experience until we send them out to foreign fields. One of our troubles is that, compared with European foresters, we are not very brilliant linguists, and that counts heavily in foreign work. The only school that now trains foresters for foreign careers, I believe, is the School of Forestry at Syracuse, under Dean Hardy Shirley. They have a course in World Forestry there and they're preparing students for work overseas.

Fry: How long has this been going on?

Gill: I would say four or five years, perhaps longer. Shirley is one of those who understands the need and has made a magnificent contribution to world forestry, especially in education. You can't blame other schools for not emphasizing courses abroad because it would be essentially preparing them for jobs that don't yet exist.

Of course, the United States exerts influence in other ways. For example, many of our lumber companies have foreign holdings and send foresters to manage those lands. That is something. We don't have to channel it through the State Department. But it is a relatively small part of foreign forestry. Not many foresters are employed in that way. At

Gill: times, too, a few of our foresters have been employed on educational work in foreign countries. Here, too, the result varies with the individual. He is, for the most part, strictly on his own and he has no national policy to guide him.

Fry: When you were working at FAO with other member nations, how did you handle the differences in forestry methods and traditions between, say, the French, the German, or the United States?

Gill: It was handled largely by selecting technically-trained foresters to help out in certain specific situations and to solve certain specific problems, regardless of nationality. If we happened to select a French forester, he naturally would be influenced by his own background, and you would find that when he had worked out a problem it had been in accordance with the French system. And the same thing happened if we sent a Finn or Swede. They would necessarily be guided by their own background.

But there was no actual conflict and usually the forester employed would be from a country which had developed techniques suitable for dealing with that particular problem. If, for example, you were going to deal with firefighting, or mechanical logging in large-size timber, the United States undoubtedly leads all the other countries, and here the American methods would be best. If, on the other hand, it was a problem in silviculture or tropical plantations, foresters from England, France, and Belgium would be best for that particular job.

Fry: It seems as if the United States would have more experience, too, in situations where virgin forests still exist. As I understand it, the German and the French traditions in forestry were based on forests that we would label "second growth," where the chief activities were regeneration and replanting.

Gill: That's true in part. We do have a first-hand experience in handling virgin forests (so do the Russians), and to that extent our background is more valuable when countries begin dealing with their virgin forests. But here again, in the problem of reforestation in South America, you aren't dealing with virgin forests. You are dealing with the problem of how best to obtain forest regeneration

Gill: often on deforested soil. In that kind of work, the British have done a great deal, and so have the Swedes, the Germans, and the French. I think, as the years pass, there is less and less sharply defined demarcation between French, German, and American methods. FAO has contributed greatly to a fusion of the best aspects of national forestry methods, by employing the team approach in which foresters from several countries work together. The result is that there is a growing interchange of experience and literature, and less parochial jealousies, and we can say that these methods--regardless of just where they came from--are more or less of a synthesis.

Fry: You think that there isn't as much international difference in methods, then, as you would find in this country between different schools of thought?

Gill: You can find just as bitter conflicts of opinion among the American foresters as you would between the American and Russian foresters. Among foresters themselves, nationalism becomes less and less important, in regard to forestry techniques. It will soon cease to exist and forestry will be the better for it. So you find less and less emphasis on "American forestry" and "French forestry." You find methods that may be a synthesis of several national systems that have worked out, and of course there are other contributions, some of them with ramifications far beyond forestry itself.

Fry: I should say that your own interests, then, have been in international forestry, and especially in the tropical aspects. Is that true?

Gill: Yes, and I'll tell you why. Those of us who have worked for any length of time in foreign forestry can't help but feel the need for closer ties among foresters everywhere, the need for widening of professional horizons, and a fuller recognition of forestry's contribution to human living. These ends, I think, can best be achieved through international contacts, not only by world congresses but by interchange of students and educators, and most of all, perhaps, by a union dedicated to the advancement of foresters and forestry on a world front.

As for tropical forestry, I've come to see the vast, still-unrealized potential of the tropical

Gill: forest soils that are destined some day to play a major role in world economy. So many millions of the earth's peoples depend intimately on these forests to a degree that we of the temperate lands find hard to realize. Yet these same forests are steadily shrinking in size and deteriorating in quality. So however little one man may do in a lifetime, it seems a worthwhile goal to help increase the usefulness of the forests of the tropics and, above all, to help slow down the tempo of their steady destruction.

You know, when some of these tropical forest types are gone--types such as the rain forest, for example--the world will never see their like again. In terms of botanical evolution, these rain forests contain the oldest vegetation known to man. The immense richness in composition of the rain forest bears witness to great antiquity. In a sense, it is the mother of the world's forests, for much evidence exists that the forests of the Temperate Zone originated here.

Richards, who probably knows more about the rain forests than any of us, believes that the rain forest is the home of the broadleaf evergreen trees from which all forms of flowering plants are derived. With its enormous wealth of species, the rain forest has served down through the ages as a genetic reservoir from which the rest of earth's flora has been recruited. For hundreds of millenia those trees have spread out from this center and evolved to become the forests of the world. And actually there is no reason to believe that this process has ever ceased. It can still be going on. In the rain forests, you have the very culmination of tree growth, in comparison with which the forests of the Temperate Zone are only impoverished remnants of species that have been able to survive the unfriendly, limiting factors of cold and drought.

Among all tropical forest types--or any forest types, for that matter--the rain forest presents the most complex structure, built up of widely-varied life forms quite unlike anything existing in other vegetation. So, with the passing of the rain forest, a great source of genetic material for the evolution of new forms of plant life will forever cease. However, it's unlikely that any consideration of such remote consequences will have any bearing on the fate of this type at the hands of man.

PROBLEMS OF INTERNATIONAL FORESTRY

Nationalism

Fry: Could we go into some of the problems that were encountered in working in foreign countries, particularly regarding cooperative arrangements where other outside governments were concerned?

Gill: You have the problem of nationalism in many of these governments, and it gets stronger with the years. In its present transition stage, it is one of the chief obstacles to good forestry and, I suspect, to good government in general. I'm talking especially now about Africa, although it also exists in a few of the Latin American republics.

Nationalism is especially obstructive in the field of forest education. For example, about fifteen years ago, FAO recommended that a cooperative training and research center be formed to which individual Latin American states could send their students. Many Latin American republics had identical problems, the same tree species to deal with, and the same marketing difficulties. Yet, each country did not possess the technical competence or the finances to make the studies needed to solve their problems. Yet if five, or even three of such countries having the same problems and the same tree species could get together and support one regional center, it would obviously divide the costs and enable them to establish a useful forestry program. They would be in a position to employ men of greater competence and to achieve greater results, and more quickly.

Well, as a general concept, everybody agreed with this proposal until you come to the problem, "Where shall we put this regional training center?" If you put it in Venezuela, Colombia or Uruguay,

Gill: other countries will object. Brazil says it should be in Brazil because that's where the great timber tracts are. Actually, what each country wants is a school and laboratory of its own, which in many cases is uneconomic and financially impossible. So we have that difficulty.

FAO finally did get a research and training center established in Merida, the University City of the Andes. They were able to do this through the foresightedness of the Venezuelan government. (Incidentally, that University of the Andes happens to be my Alma Mater.) Well, the center for a while had pretty rough sledding in the early days because it was difficult to induce other Latin countries to send their people to Venezuela. But finally, thanks both to Venezuela and to the strong support of FAO, it persisted, and last year they built a large edifice to house their activities, and I think the project is going to succeed. So nationalism is one of the difficulties we have to surmount.

The language difficulty itself is fairly easy because you've only got Spanish and Portuguese and a little French to deal with.

There is now a Latin American Science Board, which is sending men down through Central and South America to select three large centers for agriculture and forestry. One will be in Brazil, where it should be. We don't know where the other two will be. I was asked by the commission to form a part of it, but could not go. There will, however, be one or two foresters represented.

Fry: Could you tell me who was on the commission or committee to try to work out the establishment of this school and research center in Venezuela? Were you the head of this?

Gill: No, I was never in charge. I did suggest Merida, Venezuela, as the best site for a Latin American training and research center. Later, a French FAO forester named Pierre Terver--a very able man, now one of the Deputy Directors of FAO--visited Merida and also recommended that it be chosen as the site. I don't believe there was any larger or more formal commission than that. It was just the recommendation of the two of us which was finally approved by the powers in Rome.

Fry: You spoke of other obstacles to forestry.

Gill: Yes, they're numerous enough. Each new country wishes, before anything else, to become financially well-off, and all too often they are using their forest resource to obtain ready funds by giving out great concessions of forest land to be cut, in order to bring in revenue. And all of this is done without supervision or any great thought as to what the end result will be, so far as the denuded forest land is concerned. Sometimes, if they are lucky, they will have it returned by nature to forest growth, but more often the topsoil washes away and there is nothing left but arid, unusable land.

There is another difficulty, too, in all tropical countries and it's especially vicious in Latin America. This is the belief, still widely held, that since these tropical countries produce such luxuriant and enormous forests, the soil itself must be exceptionally fertile and could support a flourishing agriculture. They think, of course, that such forests must necessarily mean high soil fertility and that all one has to do is cut down the trees and you'll have at your disposal magnificently fertile, arable agricultural land.

I've seen thousands and thousands of acres ruined because of this belief, because in actual fact much of these lands are not fertile at all. They're not suitable for permanent agriculture. The only fertility comes from the trees themselves. The twigs, the leaves that fall down and rot are the only source of fertility, and there's very swift metabolism with the warm rains and the hot sun, so that what you have here really is a cycle in which decaying vegetation supplies nutrient for tree growth. The soil itself is little more than a support for the roots and the source of some minerals. But cut these trees off, let the sun and the rain beat down for several short months, and you have a forest floor that you can't even drive a nail in. Not even a self-respecting weed will grow in it. Still, you do hear a great deal about the agricultural lands of the world not being used but should be opened for our increasing millions. It just isn't so.

On much of that land, you'll never be able to grow anything but forests, and if you destroy the forests, only the good Lord knows how long it is

Gill: going to take to get those forests back. Meanwhile, with wind and rain and erosion, you may never get it back. The land has been added to the ever-expanding deserts of the world.

Another popular misconception which still exists is the belief that the lands of the tropics are covered for mile after mile, with dense, unbroken, unpenetrable forests. That isn't so, either. Only in the Amazon and a few other areas could you find vast stretches of tropical forest. In others, the land is broken up by savanna or by thorn forests.

You also have the man-made deserts. There is a place called Curitiba in Brazil, meaning "the place where trees are," but today there are no trees within one hundred miles. The forests have been cut off by earlier civilizations. We have old records in Mexico of petitions asking the government's permission to cut timber in certain areas. Today, there isn't any timber within miles, and it's all largely because the people have been cutting the forest since Montezuma's time, and even before. When the Spaniards came, they themselves hacked and burned it, and it's been a continuous performance ever since.

So the picture isn't as simple as most people would think. It isn't simple with regard to the extent of arable land and it isn't simple so far as forest exploitation goes. The fact remains that the potentialities of the tropics are enormous and that someday, acre for acre, the forest soils of the tropics will be worth more than the forest soils of the Temperate Zone, in terms of production for human needs. The one problem is going to be how to transpose an acre which has twenty different species on it, to an acre that has two or three valuable species. Plantations may be the best answer. But that's the tropical forester's job.

Post-Colonialism Adjustments

Fry: I understand from Mr. Kotok that sometimes in working with the British and French foresters, there was a problem of the old colonial attitude toward the Latin American nations. Did you find that this was true in FAO?

Gill: I'm not sure what Kotok meant by the "old colonial attitude."

Fry: He meant a lack of respect, I think, for the South American governments.

Gill: I don't believe it's a lack of respect so much as a realization that professional standards varied widely in different countries. We have to admit that there isn't the same level of professional integrity or professional competence in all the South American countries, or the newer countries of Africa. There was a great deal of what we call in Spanish "mordida," which means "the bite," which is the graft which sometimes riddles the whole governmental structure. But so far as I know, most of that has been cleared away, at least in the countries I have worked in. Today, for example, the Mexican forester himself is a competent professional man doing splendid work and doesn't have to feel apologetic to any other nation or profession.

But just the opposite is happening in Africa, where you're having new emerging countries. There, because of their hatred of the past abuses of colonialism, in many instances they have expelled the British, French, Dutch and Belgian foresters, it's quite understandable, but it doesn't make for efficiency. For the places of the trained men who are leaving are being taken by nationals, who frequently have very little competence or training or background. Gradually, of course, these countries will build up a corps of trained, skilled men, but meanwhile the forests are being plundered, wildlife is being slaughtered, and we don't know how soon this era of devastation will end.

And what is even worse, the results of years of careful past research--in some cases one hundred years

Gill: of careful gathering of data--is not only being discontinued but is being lost in these emerging countries. (Now that's not true in Latin America.) Recently there hasn't been a great deal of research in that part of the world, not nearly as much as was produced by the British in India, the French and Dutch in Africa, in the Congo and even further south, so there's much more to be lost. And it means not only the loss of the pounds and francs and dollars that were put into the work, but the loss of decades of invaluable records. And you can't duplicate the records by the expenditure of money alone. It requires years.

I have been doing what little I can in recent years to see if we can't preserve, somewhere, the results of research that we already possess but which we are rapidly losing and destroying. A Dutch forester, for example, said to me not long ago, "We have in Amsterdam, in packing cases in the basement of one of our buildings, more research knowledge about the forests of Indonesia than all Indonesia itself possesses." Well, records in a packing case can be easily lost, and if you put them in packing cases and distribute them in basements all over Europe, it won't be of much use to students. All that material should be gathered together, but by whom, and where, is the problem.

Fry: I should think American universities could help.

Gill: It's hard to interest them in that sort of thing. It's a laborious task, and costly. Here again, though, there ought to be one central place for it all. One good place would be Oxford, England. Another would be Syracuse, where Hardy Shirley has more knowledge of the needs of world forestry than most American foresters.

Attitudes Toward the United States

- Fry: When you were in these countries for private industry, perhaps you didn't come into contact with people who could influence their governments on pro- or anti-American decisions, but later on you probably met quite a few. Could you comment on their attitudes? Did they fear exploitation?
- Gill: With regard to the earlier days when I was representing some American firm, in most cases I would see the governors of the countries that I visited and tell them exactly why I was there. Usually, they were very cooperative, for it meant industrial development. I remember in British Guiana, where I was surveying some of the huge bodies of timber, the governor said, "You may have heard that we don't want American capital in here, but don't you believe it. You're very welcome. And anything that I can do, you can count on."

That sounded hopeful enough, but then a strange thing happened. I deposited several thousand dollars in British Guiana, in order to have some of their logs sent to the Forest Service Laboratory for testing. Not a log was ever sent and later British Guiana returned the money. Apparently between the time the governor assured me of their cooperation and the time we sent for the logs, something had happened. So in that case, we did not get very much cooperation. Then too I can remember when the Secretary of Agriculture of a Latin American country refused for two long years to even see the head of an FAO Forestry mission, or allow the national Forest Service of that country to cooperate.

But in most cases we have had splendid cooperation, especially from the Latin Americans. I would say that, with a few exceptions, we are welcomed when we come in as foresters and not as politicians or exploiters. We are warmly welcomed by the foresters of these countries themselves, and as foresters we can forget this obstructive nationalism.

I remember some years ago a Mexican senator addressed a gathering of American conservationists and foresters in Mexico City. I can almost remember

Gill: his exact words. He said, "You men are the true ambassadors, you who are concerned with the soil and the products of the soil, with the future of man's environment and the preservation of his resources. You come here asking nothing except to preserve and protect the good earth and the products of the good earth, and you are very welcome, and you will always be very welcome." I think that is the feeling that most countries have toward those of us who come to talk and work on the common age-old problems of raising the productivity of the soils of the world.

But as soon as you ascend into the rarified and often sterile atmosphere of diplomacy, you become involved in red tape and jealousies and all the rigid formulae of outmoded rituals. I know it isn't fair to generalize, but my own experience has been that the United States is too often badly represented by men that the State Department sends to foreign lands. But our agriculturalists, foresters, and technical men, generally, are usually warmly welcomed because they are interested in finding solutions to common problems and not in national prestige.

Among international organizations, FAO is doing most effective work in easing national tensions. From its very beginning, the men of FAO worked through international committees. One of the first I happened by chance to be chairman of. It met in Geneva to discuss the problems of the tropical forests. We made a number of recommendations, many of which were later carried out by FAO, as well as by the nations themselves.

The foresters of AID have done excellent work, too, in easing national tensions, wherever they're allowed to, but unfortunately the foresters had to work in AID missions which in many cases are headed by political appointees with no scientific background and, for that matter, no particular interest in the problems of the country. Often they do more damage than good.

And there was this added trouble. Twenty years ago we were a rather straight-laced nation, judged by European and Latin standards and, as a matter of fact, judged by our own present-day standards. I remember one mission chief in Chile saying to me,

Gill: "I've sent my last Chilean student up to the United States. Invariably, they come back hating us." These were young students who came here to study for a year or two and do research. In many of the houses they lived in, their American hosts would frown on their custom of having wine for dinner, a national custom that had been theirs all their lives. They had, too, certain freedoms of expression regarding sex or other matters about which our generation of twenty years ago felt should better be soft-pedalled. So these Chilean boys felt that they were in a Puritanical and forbidding sort of atmosphere, all of which made them eager to return home. Today, this is seldom a problem, but it is because we have changed, not they.

But by and large, I am convinced it is the technical men who are doing much more toward international fellowship than all of the diplomatic gestures in the world. I remember our World Forestry Congresses, which are held about every five or six years, as serving a most important function toward international forestry, for they enable the foresters of the world to come together and talk over mutual problems. These Congresses are not a government show. Many research foresters attend, many of whom are employed by private industry. Many come from the schools. They drink together, they form friendships, and plan useful cooperative projects. There's where I think our brightest future may lie in international forestry, with the exception of what might be brought about through the creation of an International Union of Societies of Foresters.

Fry: When you were working for FAO, then, I gather that the more you could keep official government influences in the background, the better you could operate. Were you able to do that?

Gill: It was more a question of balance between governmental and non-governmental influence. In the early days it was almost wholly governmental, but no longer. Without governmental support, international forestry efforts would be almost impossible. At the same time, an enormous amount of progress is made by individual foresters in private work, especially in the schools. But you had to have government participation, for one thing because FAO's a government show, and because in many spheres of forestry, government itself has taken the leadership.

Gill: In some countries, foresters are holding important positions in government. We have in Mexico foresters who are governors of states. In Finland, we had a premier who was a forester. The first governor of Alaska was a Yale forester, and to the extent that we can infiltrate government with foresters or agriculturalists, we will have at least some professional understanding among the lawmakers.

The rate of progress we are likely to make in the broad field of natural resources is limited to some degree by the background of our legislators. That's where the Russians are ahead of the world. They elect professional men to government to a much greater extent than we do. Their legislative bodies are over half composed of men with some scientific background, so when technical matters are discussed you don't have to go back to the grade schools. But in all broad forestry movements, no matter where, government should lead. Yet unless they depend on competent, professional men for the creation of policy and for administrative action, rather than on the gentlemen with the striped pants, we will not be getting very far. Many countries have already learned this--others not yet.

Fry: Do you think that foresters seem to be more able than other professionals to be in close contact with the total picture of issues in a country? I get the idea from some of my interviews that there may be a feeling of camaraderie between foresters which doesn't always exist in other fields.

Gill: I like to believe that. It may not be unique to the forestry profession, but there's actually a strong cohesive element which, to my mind, makes forestry a strong factor in bringing the nations of the world a little closer together.

Then too, the average forester has fairly well-rounded experience in land use and biology in general, and in the handling of natural resources. That background gives him a certain value in fields other than merely forestry. The President of the Rockefeller Foundation, when he was heading up the work of agriculture for the Foundation in Mexico, almost invariably would hire American foresters whenever he could, even though the work itself was in a non-forestry field. It appears he valued the educational background of the professional forester.

Gill: That is true today in the Peace Corps. The Peace Corps men are doing blessed little forestry, but they do welcome foresters to their ranks, no matter what kind of work is to be done, because foresters, through education and experience and a certain flair for improvising, have been able to get things done. Foresters, more than any class of professional men, are equipped by education, experience and interest to be the wildland managers of the world.

We haven't been, unfortunately, and it's too bad, because no other profession is equipped to protect the wildlands, whether there's a stick of timber on them or not. Actually, it's the acre without timber that needs the most attention, for the land itself is and always will be more important than the forest or the agricultural product it provides. In those top four or six inches of topsoil lies all of the future of man, and the forests are one of the most effective protectors of those four inches.

Fry: What changes lie ahead for forestry?

Gill: Without doubt, as forestry becomes more and more specialized, the need will increase to produce specialists, the men with competence in narrow but necessary fields. They will be far removed from the forester of yesterday, just as the medical specialists of today differ from the family doctor of a few years back. My hope is that, in addition to the specialists, we will also have forestry leaders capable of creating policy, men who will function on the administrative levels of government and industry. Without that, foresters will be little more than technicians carrying out the decisions made by men in other disciplines.

As to the future of forestry itself, it is a profession that's well accepted now throughout the Temperate Zone. It's established as a necessary part of national activities. We are approaching a kind of stability in the Temperate Zone, so that we can say within certain limits what lands will produce forests, what lands are best for grazing, and what for agricultural crops. In the tropics, the future is still uncertain. Each year the forests are shrinking down there. Forest land is being cleared for agriculture, new nations with shaky economies are

Gill: destroying their forests to raise ready money, so here no certainty exists. And yet, the tropical forest lands of the world are about equal in size to those of the Temperate Zone, and they have contributed in terms of forest products very, very little. Meanwhile, I think that forestry as a whole will more and more become a force making for international cooperation.

MEN AND ISSUES (Impromptu Evaluations, Background
for the Series)

- Fry: Which men do you feel could give me information about the influence of the Forest Service on congressional legislation?
- Gill: Earle Clapp and Sam Dana, among those still living, would be the best. Also Marsh and Ringland would give you interesting material.
- Fry: Apparently the Forest Service was able to have its own delegation of a few loyal members in Congress.
- Gill: We've had a few bona fide foresters in Congress, and a still greater number who never were foresters but who worked together with foresters for conservation, and of course they had an influence.

But the greatest influence on forestry legislation, to be sure, was the legislation initiated by Gifford Pinchot through his friendship with Theodore Roosevelt and because of his own personal prestige. So far as I know, we never had any lobby or any direct pipeline to the Hill, although I think it was Secretary of the Interior Ickes who said something to the effect about the Forest Service having the strongest lobby in Washington and using it ruthlessly. That, of course, was not true. What we did to influence legislation when I was in the Forest Service, we had to do more or less sub rosa. We weren't supposed to, but it was common practice among the Federal Bureaus.

- Fry: You mean getting grass roots support in the regions?
- Gill: Yes, and I mean giving some friendly Congressman a bill that we had written and saying, "This seems to be the kind of legislation that would be desirable from the standpoint of forestry." Meanwhile, many Congressmen would ask for the opinion of the Forest Service on legislation that they felt was desirable, and in that way we have been able to make our voice heard and our influence felt, but never to the extent that we'd like to or to the extent that would

Gill: have been more beneficial for the country.

One of the more regrettable aspects of forestry in the United States is that it's never been recognized, as in some countries as Sweden, Finland, Norway, Germany. Here in the United States, federal forestry has always been more or less tied to the tail of the Department of Agriculture. Many foresters will tell you that's where it belongs, but when they say that I think they are motivated somewhat by fear that federal forestry might find less acceptable places than Agriculture, such as the Interior Department. The worst nightmare any government forester could have, and I among them, was of a transfer of the Forest Service to the Interior Department, which we affectionately called the "Inferior Department."

Fry: You were saying, just before I turned on the tape recorder, that the administration was mightily upset over Acting Chief Forester Earle Clapp's efforts to prevent the transfer of the Forest Service to Interior.

Gill: Yes. But I don't think that was the only issue. I was no longer with the Forest Service and so was able to work in the open against that transfer. When Henry Wallace was Vice President, he and I played squash together several times a week, and once I asked him, "Aren't you ever going to have Earle Clapp appointed Chief Forester? He's been serving in that capacity a long time." Wallace laughed, "We don't even dare mention his name over at the White House," he said. Clapp was one of FDR's pet hates.

Fry: I don't understand why President Roosevelt was so vindictive about that one point.

Gill: Roosevelt couldn't tolerate opposition, and especially he couldn't tolerate Earle Clapp's methods. Clapp would go directly to Congressmen and to anyone else that he believed could help. It was a bit the same activity that got MacArthur fired under President Truman's administration.

Fry: And Chief Forester Pinchot, under Taft? [Laughter]

Gill: No, that was something else again. That was actually a case of an attack on a cabinet officer by a bureau chief. The mere fact that Pinchot was right made no difference, in Taft's opinion.

Fry: Dr. Clapp tells me he may write out a statement of what happened, but he definitely doesn't want to tape record any of this.

Gill: That's too bad. Clapp knows more about those early fights than any of us, but Roosevelt never forgave him. And when Lyle Watts was made Chief Forester of the United States, Roosevelt insisted that as his first official act he get rid of Clapp. Watts told me this himself.

But in addition to his opposition to the transfer, Clapp was after something that conservation badly needed, but it was something that the country wasn't ready for and probably never will be: the public [federal] regulation of forest practices.

Raymond Marsh was one of the great proponents of public forest regulation, which was one of the fights which split the forestry profession wide open. One side, led by Clapp, sincerely felt that the only effective way to secure good forest practice on private timberland was through regulation. The other side, equally sincere, believed regulation unworkable and put their faith in voluntary cooperation. But whatever may be the judgment of history regarding the movement for federal regulation of forest lands, there can, I think, be no disagreement over the fact that Earle Clapp, who never held the title of Chief Forester, was in actuality one of the most effective, and certainly one of the most dedicated, of all our federal forestry chiefs.

Have you interviewed Arthur Ringland yet? He would remember many details.

Fry: I have him on my list, but I haven't called him yet.

Gill: He's one of the few living here today who was one of the original Pinchot men. He's now in his eighties. He'd be better than any of us for facts on the old days. He was the big boss out in New Mexico, Region Three, and he also held a job that no other United States forester has ever held and perhaps never will. He was, in effect, our forestry attaché in Europe, and as such he had a detailed European background.

Fry: When was that?

Gill: That was before Hoover's group began its food relief, which was joined by Ringland. I don't believe any of the men will be able to give you the first-hand background that Arthur Ringland can give you.

Fry: I'm also going to interview Raymond Marsh and Christopher Granger.

Gill: Granger will be especially good.

Fry: Maybe I should ask Marsh more specific questions.

Gill: It won't matter what you ask him, he's bound to tell you about his adventures in Sweden. Part of the Pack Foundation contribution was spent to publish a very useful manuscript of Marsh's on Scandinavian forestry. He'll tell you about that.

Have you seen Kneipp yet?

Fry: Just briefly, last night. I interview him tomorrow.

Gill: Good. He's an intelligent and articulate man and should be a source of much needed information. Not the kind of "old-man" information that I'm afraid you get so much of, he'll give you both good, basic, and well-documented material. I have marvelled at his ability over the last forty years to talk in complete and logical sentences. I don't believe he ever saw the inside of a college, so he hasn't been confused by a formal education.

Fry: There are two recent retirees whom I want to call today--John Sieker in recreation and Lloyd Swift.

Gill: I don't know a great deal about Sieker. Swift has done marvelous work.

Fry: Has he always been in wildlife management?

Gill: No, he was a forest ranger in the old days. He has written a number of articles--editorials, really--and they have been published in mimeograph form. I think in book form, too. He left forestry because he was interested in the wildlife aspects, although he was always a forester at heart, so I think he could tell you about how he feels about the responsibility that we haven't quite redeemed in taking care of our wildlife. But when I say that, I remember Aldo Leopold, a forester who has made wildlife management

- Gill: history. I believe the basic idea of "carrying capacity" [of the land] was originally his. Aldo Leopold, incidently, I regard as one of our very greatest foresters. Some of his writings will, to my mind, rank with those of Muir or Thoreau.
- Fry: On the major legislation in Congress, such as the Clarke-McNary legislation, who could best comment?
- Gill: Kneipp could. He would know about that at first-hand, and so would Granger. I was in the Service at the time, but had no direct connection with legislation.
- Fry: Wasn't Marsh a Congressional liaison man?
- Gill: He might have been, but of course not officially. He was "Assistant Forester," and as such must have handled a great deal of legislative matter, but he can tell you about that. The man in charge of the legislative processes for many years in the Forest Service is now head of the Bureau of Recreation, over in the Interior Department. His name is Ed Crafts. But as I say, Clapp or Kneipp would know about all important legislation better than any of us.
- Fry: Have you known all the chiefs of the United States Forest Service?
- Gill: All of them. Mr. Pinchot I knew least of all. He had, as he said to me once, "been fired in 1910," and I didn't enter the Forest Service until 1915. Later, I had an opportunity to see him very often, for his home was within a stone's throw from my office. He was a man of great force and great magnetism.

Henry S. Graves, who succeeded Pinchot, I knew very well indeed, and when FAO was formed in Quebec, Mr. Graves was chairman of the Forestry Committee and I acted as secretary. I think you will find a very adequate estimate of Colonel Graves' contribution to forestry in Gifford Pinchot's book, Breaking New Ground.

Mr. Silcox was an interesting forester, one of the most eloquent men I've ever known. Actually, how he came into the Forest Service was one of those fortuitous things that happens so often. Silcox had

Gill: been a Yale forester, but left forestry and became involved in the labor movement. Then, when the Forest Service was in need of a new chief, Roosevelt and Tugwell began looking around and Tugwell, having known Silcox personally and probably having admired him greatly, used his influence to get Silcox made the Chief Forester. There was a great deal of skepticism at that time as to how well Silcox would lead the Forest Service. Actually, I've heard that he was a rather weak administrator, but he had also as much magnetism as Pinchot and, to my mind, was a far better speaker. I traveled for several months with Silcox through Germany and learned to admire him immensely.

Lyle Watts I had a great affection for. He and I worked together for several years on the international aspects of forestry, and I think to the three men--Pinchot, Graves and Watts--should go the bulk of the credit for the Forest Service's interest in and aid to world forestry.

Fry: I'm going to stop on my way West and interview Dr. Samuel Dana at Ann Arbor.

Gill: I'm glad. He is the most distinguished living forester we have today.

Fry: I thought he might be very good for helping us get an idea of how forestry as a field of study developed, more or less parallel to the rise of the Forest Service, and how each one contributed to the other. Do you think that the development of the Forest Service, in large measure, influenced the rise of the field of forestry in colleges and universities?

Gill: It was the dominant factor in influencing the direction that a good many of the forest schools took. For many years, federal forestry offered the chief possibilities for jobs. Today, it no longer holds that dominant position. But don't forget this: the early forest schools, such as Yale and Cornell, had an enormous influence on the development of the Forest Service itself. But all this is something that you can get from Dana, and I think it's the most valuable thing he can give you--that is, his viewpoints on forest education. He's thought about it, lived it, worked in it, and knows more than anybody living about United States forestry education and its inadequacies--how it falls down and

Gill: what should be done. That, someday, I think, will be considered one of the great contributions that Dana has made. He's never put it all into print, but I remember a speech he made at Yale, which was later printed I think in the "Yale Forest School News," that summarized in a masterly way the needs of forest education.

Fry: What are the main issues in forest education? Is it the general education versus the specialized professional education issue, or is it a curriculum battle--silviculture courses versus wood products, for example?

Gill: No, that aspect isn't important. The important point is whether or not foresters are to be educated as technicians or as leaders in the field of conservation. We need both, of course, but to my mind the schools are specializing too early, and worse still are taking students with practically no grounding in the humanities. Now--and this, too, is my private opinion--they do not give the type of education that should prepare them for broad leadership. There is too much of the "trade school" aspect in many of the colleges giving degrees in forestry. The result is that forestry lacks the stature of some professions, such as medicine and law, because the tendency has been to specialize too early, with insufficient background in the humanities and in general education, the sort of thing that a professional man should have in any of the disciplines.

Many forest schools have standards so low that their graduates speak English as if they were about to write a popular song. They may become competent technicians, or experts in specific fields, but they will not be articulate men, able to hold their ground with men who have had a broad educational background. That's the sort of thing that Dana is working to achieve. Probably, in the future there should be a distinct cleavage and schools will prepare men for trade technicians on one hand, and on the other, foresters with broad-gauge background, equipped to be leaders in formulating policy for land management and dealing with broad conservation problems. That, as I told you, is one of the things that the Pack Forestry Foundation tried to do: to create leaders by selecting men who were most promising and giving them additional education in Europe or here, for two years and perhaps more. And in many cases, that paid off. We've had a number of outstanding men who are Pack Fellows.

A SUMMING UP

Fry: From your personal knowledge of the past progress of forestry, what would you say about its future?

Gill: When you try to predict the status of forestry for the year 2000, say, which incidentally is a very brief time in the life of a forest, you find yourself dealing with a host of fluctuating factors, some favorable, some not. We are making impressive strides in many directions, but we are finding increasingly destructive forces in others.

Of course the greatest threat--one that involves not only forestry but the quality of life and even the very security of life everywhere--is the increasing number of the earth's peoples. The solution here is beyond the competence of the forester, alone, but he cannot ignore the menace it carries to forests and forest land. It is already having a disastrous impact upon the forests of the tropics, where desperate and unwise agricultural development is being carried on in a blind effort to match food supply with increasing populations. Then, too, many developing countries have resorted to destructive and widespread cutting of their forests in an effort to bolster up their faltering economies.

Here, it is likely to be a race between the establishment of a forest policy and the loss of valuable forest and forest soil. The rate at which the younger countries are producing skilled manpower, too, is far slower than their rate of overall development, and they must look elsewhere, meantime, for technical assistance. Here, FAO has a splendid opportunity and is responding to it magnificently. But one must remember that all aid and technical assistance is likely to be wasted in a country without a sound forest policy. It can even be detrimental.

World progress in forestry, of course, will be along an uneven front. In many cases, it will depend on factors outside the field of forestry and over which foresters themselves will have little control. Meanwhile, there will be increasing need

Gill: for foresters who have at least equal competence and articulateness and prestige with other administrators. For the Temperate Zone, as I have said--except for the increasing population problem--forestry has little to fear. It has been stabilized. In the tropics, the future is still clouded. We have made great strides in widening the use of tree species. Meanwhile increasing dependence on plantations of quick-growing species gives promise of bringing tropical forest lands to high productivity.

But of one thing we can be very sure, forestry is destined to be as permanent a part of the world economy as is agriculture itself. No one could have said that, with any degree of certainty, fifty years ago. I remember when I was a student at Yale, I met an old friend of my father's, a Yale graduate and one of the best-known lumbermen of his day. He asked me what I was doing in New Haven. "Studying forestry," I answered. He laughed. "Boy, that's not a profession, that's a racket." Many would have echoed that appraisal in those days, but very few today.

I think the ideal for any country is a sound forest policy, implemented by government, and supported by public opinion. Good forest policy makes possible all progress, but as Francois--one of the great leaders of French forestry--has said, "A good forest policy must be part of a good economic and social policy, well conceived, and correctly implemented." And this is dependent upon a country's political situation and the stability of its administrative structure.

Fry: I know you have to leave. This has been most informative. I wish we could expand it to ten more sessions.

Gill: You're very welcome, and good luck with the others.

APPENDICES

Presentation of the
Sir William Schlich
 Memorial Medal
 to Tom Gill

by E. L. Demmon, President
 Society of American Foresters
 Milwaukee, Wisconsin
 October 27, 1954

Sir William Schlich, born in 1840, inspector general of forests in India, professor of forestry at Oxford University, author of the monumental five-volume *Manual of Forestry*, probably exerted a greater influence on the advancement of world forestry than any other forester of his era.

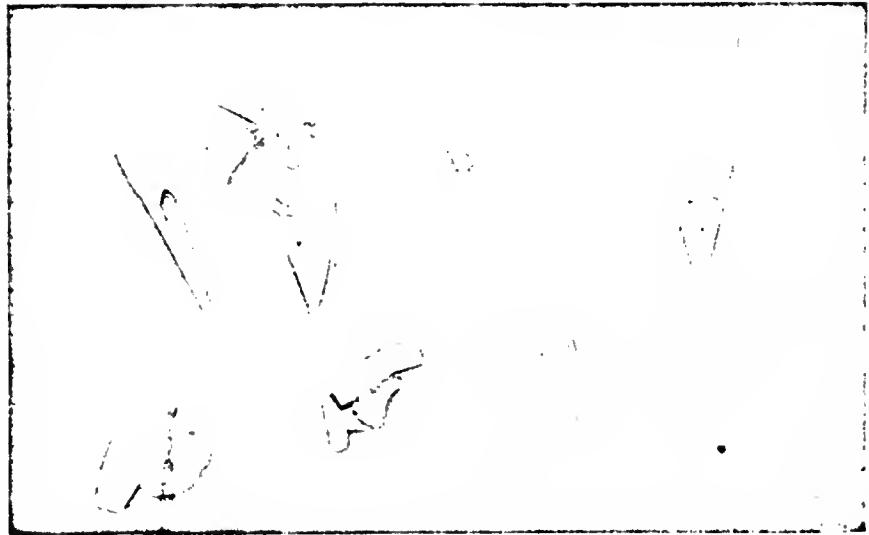
Following his death in 1925, English speaking foresters throughout the world subscribed to a fund to establish a Foundation that would memorialize his distinguished services to forestry. Under the custody of the Empire Forestry Association in London, the annual proceeds from the trust fund of the Foundation are awarded in rotation to the various nations in the British Commonwealth and the United States.

When the first award was made to the United States in 1932, the Society of American Foresters was designated as its custodian. Sir William had been an Honorary Member of the Society. Hence it was appropriate that the Council of the Society should utilize the grant to finance the design and casting of a medal in his honor. Known as the Sir William Schlich Memorial Medal it is awarded by the Council of the Society in recognition of outstanding achievement in the advancement of forestry.

President Franklin D. Roosevelt was the recipient of the first medal, awarded in 1935 for his many services to the conservation of natural resources. Gifford Pinchot, founder and first president of the Society of American Foresters, received the second award in 1940. Thereafter, the medal was presented as follows:

- To Henry S. Graves in 1944.
- To William B. Greeley in 1946.
- To Herman H. Chapman in 1948.
- To Ralph S. Hosmer in 1950.
- To Ellwood Wilson (posthumously) in 1952.

In behalf of the Society I now



PRESENTATION of the Sir William Schlich Memorial Medal to Tom Gill. L to R. President E. L. Demmon, Dr. Gill, George Banzhaf, toastmaster, and Vice President DeWitt Nelson.

have the honor of making the eighth presentation of the Schlich Medal. The recipient is an American forester who has done as much perhaps as any living man to extend the art and science of forestry throughout the world. The name Tom Gill has become almost synonymous with international forestry.

Born in Philadelphia in 1891, Mr. Gill received the degree bachelor of arts from the University of Pennsylvania in 1913, and the degree master of forestry from Yale in 1915. In that year he entered the U. S. Forest Service as an assistant ranger. During the first world war he was an officer in the Air Service, U. S. Army, then returned to the Forest Service becoming a forest supervisor in 1922. He was in charge of Forest Service educational activities during 1922-1925. Following a year with the American Forestry Association as associate editor of *American Forests* magazine, he became secretary of the Charles Lathrop Paek Forestry Foundation in 1926 and is now the Foundation's executive director.

Beginning with a survey, partly aerial, of the forests of the Caribbean, Tom Gill's travels in behalf of forestry have been extensive. He was secretary of the forestry committee at the first international conference on food and agriculture held in Quebec in 1945, and was

special adviser on forestry to the United Nations Conference on Food and Agriculture at Copenhagen in 1946; and has been chairman of the FAO Committee on Unexploited Forests since 1947. He was a delegate to the Inter-American Conference on Renewable Natural Resources in 1948; and chairman of the American delegation to the FAO Conference on Land Utilization in the Far East in 1951. During that year he served as adviser on forest policy for Japan, and in 1952 represented the United States at the Far East Forestry Commission meeting and developed a forest policy for the Chinese Nationalist Government for Formosa.

Since 1946 he has been the diligent and efficient chairman of the Society of American Foresters' Committee on International Relations. As such he represented the Society as well as the United States Government at the third World Forestry Congress in Helsinki in 1949, and will be head of the Society's official delegation to the fourth World Forestry Congress to be held in India in December.

Of honors Tom Gill has already received not a few. In addition to having been elected a Fellow of the Society of American Foresters, he is an honorary member of the Society of Mexican Foresters. In 1947 he was awarded the medal *Merite Agricole* by France for his assistance in forming a forestry

unit within the United Nations. In 1953 he was given an honorary doctor's degree together with a gold medal by the University of the Andes in Venezuela.

Dr. Gill, through your understanding of the role of renewable natural resources in raising and maintaining high living standards

for people everywhere, through your diligence in promoting education and research leading to more careful conservation of those resources, and through your abiding faith in the ultimate value of international cooperation as a means of attaining good resource management by the nations of the world,

you have been an honor to American forestry and an inspiration to your professional colleagues.

Tom Gill, in behalf of the Society of American Foresters it is with great pleasure that I present to you the Sir William Schlich Memorial Medal for distinguished service to forestry.

TOM GILL
1500 MASSACHUSETTS AVENUE
WASHINGTON, D. C. 20005

May 29, 1968

Mrs. Amelia R. Fry
Regional Oral History Office
The Bancroft Library, Room 486
University of California
Berkeley, California 94720

Dear Mrs. Fry:

Yes, I probably regretted more than you that we didn't get together during your Washington sojourn.

But I'll be glad to go over my interview as quickly as possible and send it back to you promptly. Please send the transcript to me at the above address, Apartment 841.

As to the longer memoirs -- who knows? One of your troubles is that you are most persuasive.

No, I never did get to San Francisco to interview Hutchinson, but I understand he has been working for a long time now on his memoirs.

Just came back from lunch with Henry Clepper, and we talked of you much.

Every good wish.

Sincerely,


TOM GILL

TOM GILL
1500 MASSACHUSETTS AVENUE
WASHINGTON, D. C. 20005

July 18, 1968

Mrs. Amelia Fry
Regional Oral History Office
Room 486
University of California
Berkeley, California 94720

Dear Mrs. Fry:

Your good letter of June 10, together with the rough version of our interview, reached here safely.

After resisting an understandable impulse to commit hari kiri, I decided to ask you for enough time to thoroughly revise the present draft.

In many cases, I have given only partial information and I think that rather than work on the draft you sent me, it would be more satisfactory to both of us if I dictated and edited here another version.

My hope is that in spite of the delay you will agree with me that this is worthwhile. The final product should not be very much longer than the present one but it will, I think, more closely approximate an acceptable version.

Best wishes.

Sincerely,


TOM GILL

TOM GILL
1500 MASSACHUSETTS AVENUE
WASHINGTON, D. C. 20005

December 5, 1968

Mrs. Amelia Fry
Oral History Office
Room 486
University of California
Berkeley, California 94720

Dear Mrs. Fry:

Enclosed - probably to your consternation - is my latest attempt at the autobiography. It's far from a polished job, so any changes that you care to make I'll be quite content with.

Enclosed also are two documents. I was not certain which seemed to be most applicable, so I have signed both.

I do hope that you won't feel that all the time and effort you have spent in regard to this manuscript has been totally lost.

Best wishes for the Holidays.

Sincerely,



TOM GILL

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