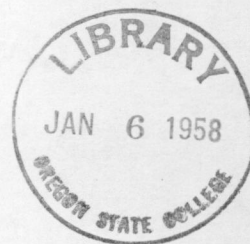


PERSONNEL PROBLEMS IN THE FOREST SERVICE

SENIOR THESIS

OREGON STATE AGRICULTURAL COLLEGE

SCHOOL OF FORESTRY



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PERSONNEL PROBLEMS IN THE FOREST SERVICE

The needs for this study are evident when one looks at the inefficiency, the waste, the mal-adjustments, the strife, and the social problems found in the Forest Service. These troubles are caused by various things, some of which may be remedied, and some which may not.

Personal aptitudes is one factor which cannot be greatly changed. Some people are born with special abilities, or they may be constantly trained until they become specialists. It would be ridiculous to select a weak skinny man for heavy road work. In that position he would be a misfit, and would be a potential personnel problem. Every man cannot do everything, and it is the duty of the employer to fit a man to the job he is especially adapted for. The statement that personnel aptitudes cannot be greatly changed does not mean that a person who is very inefficient at a job cannot be trained to become very proficient. It does mean that it is usually easier to "fit the job to the man" than to "fit the man to the job."

Differences in interests and motives are other factors which are not usually changeable. It is just natural that people's tastes should differ, and for that reason their appetites must be satisfied differently. For example, a man who must circulate continually with people would not

be satisfied and probably not efficient if placed on a lookout. Interests often change, however, and this must be considered.

Ability is one factor which is changeable. With practice and experience a man is better able to do a task. If he is not advanced or his pay raised he is apt to become discontented, with a resulting personnel problem to be solved. The worker should be given work equal to his ability.

The one big factor which is changeable, and which we must greatly depend upon is "environment." This includes working conditions, supervision, relation with the employer and fellow-employees, opportunity, and so forth.

A chart on page 18 of Scott and Clothiers "Personnel Management" shows the relation between a man's capacities, interests, and opportunities, and his work. It is reproduced here for clearness. By maintaining a balance here we have a symmetrical figure, and the right man is in the right place. Any variance in the size of the small triangles, however, will indicate inefficiency and problems to be solved.

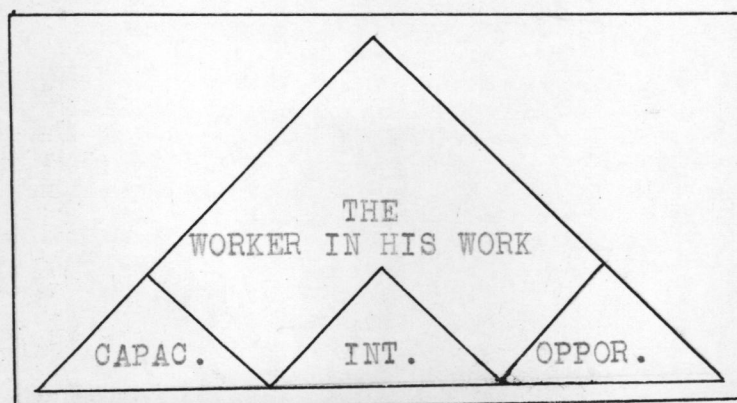


Fig. 1--Chart showing the perfect balance between Capacities, Interests, and Opportunities.

Henry S. Graves has stated "The key to successful work in forest protection, silviculture, or utilization is oftentimes the interest, enthusiasm, and ability of the local field officer, the ranger, the woods foreman, or logging boss. The training of these men for their special work in the forestry undertaking is as important as that of the professional forester."

The Forest Service has encountered a very difficult problem in the building up of a competent local field force. This applies to the more important supervisory officers and also to the rank and file of men engaged in fire protection, in construction and maintenance of trails, telephone lines, and other improvements, in scaling, in handling timber sales, and in a multitude of other tasks. The final success of the management of the forests depends on the local men. The whole system of fire protection breaks down if any of the men are incompetent. Many a time a fire has broken loose and went on a rampage just because of the incompetence of a single man. In all phases of forestry work the supervision and inspection will avail nothing if the local men are inefficient.

This local work is of an intensely practical character. Ability to handle men, experience in the woods, knowledge of the region, and some practical training in forestry are essential qualities for success. Men with this combination of qualities have been difficult to find, and the Forest Service has had to build up its local organ-

ization largely by recruiting practical men and then giving them their technical training on the job.

The speeding up of work and the increased competition in industry have caused numerous personnel problems to arise. It has been shown that the Forest Service has paralleled industry, so that it has problems equally as great as in industry. The following history of personnel work will show the various stages of advancement.

From very early times there have been personnel problems. These date back as far as group activity began: and when the pyramids were built in Egypt there were thousands of men working on one pyramid for perhaps twenty years. This condition must have resulted in personal strife. This was handled under the management plans, and was not classified as "personnel methods." There were no competing firms in those days and consequently the personnel problems were not as great as they now are, however, the records show that a great deal of attention was given to organization, welfare, and planning. As the volume of these problems increased it was delegated partially to individuals, but the managers still did some of the work.

Around 1910 the interest in personnel problems greatly increased and much discussion was aroused. Up to this time most of the hiring had been done by the foremen, but the introduction of employment offices stopped considerable of this. As a result a veritable army of "employment experts" sprang up. All kinds of pet schemes were used to determine

a man's fitness for a position, but this did not end the problems.

Following this period came the struggle for standing and authority; the men fought for more authority, more recognition, more jobs, bigger titles, and bigger pay. This, at first, did not please the line executives, but they later saw the chance to get rid of disagreeable duties and responsibilities by shifting them to this new office. This was carried to the extremes.

After the employment offices came the rapid development of new forms and records. Some of these are now very valuable. In some organizations the development took other forms. The personnel officers worked for better homes, organized athletics, formed mother's clubs, protected employees from loan sharks and the like. Others did health and sanitation work, while the teaching of English and citizenship to the foreigners was stressed.

After the World War the rating of employees became a fad. This increased in complexity, subsided, and then started off in new lines. Now more attention is given to rating executives and not workmen.

Next came the accent on training. This started before the War, but received its impetus during this period, and its effects are still plainly visible.

At last comes the wave for job analyses and job specifications. This is still on the upgrade and is very important. Many writers call it "the basic thing in the personnel

6.

game." Another says that "it has made personnel work a science." These statements are probably a little over-enthusiastic.

In the first lines of activity the personnel work always concerned the laborers. The executives were thought to be above reproach, so that they were not analyzed or their methods doubted.

At the present it is accepted that the executives are more important than the laborers, and it is these men who are now being trained, analyzed, and controlled.

Although personnel work covers a wide field in forestry, not a great deal has been written about it. There is considerable material on personnel in industry, and as part of this applies to forestry it will be used in some cases. A number of bulletins have been put out on Forest Service personnel problems. During the early part of 1930 a study was made on personnel management by one hundred and fifty supervisors from all over the United States. A course of ten lessons were given, and forty to fifty written discussions of each lesson were printed. These discussions show the views of the different supervisors and cover many of the problems. Quite a few of the suggestions are the author's personal opinion and hence are subject to criticism. However, the conclusions were not reached without a consideration of written material. No specific rules can be laid down but only general principles which will apply to most cases are given.

James E. Scott of Laconia, New Hampshire divides personnel management into divisions when he states, "Forest Service personnel management, in my mind, is not unlike the long and tortuous main thoroughfare of one of our great American cities. Its major intersections might be marked A. recruiting, B. selection, C. assignment, D. training, E. supervision, F. output, G. discipline, H. advancement, I. weeding, and J. retirement. At each of these major crossroads the executive, the man at the wheel, encounters problems of outstanding importance with a goodly sprinkling of lesser problems calling for quick and sure decisions all along the way." Each of the above functions bring forth numerous specific problems which will be discussed in this thesis.

First, the personnel problems under "recruiting" will be discussed. The Forest Service will have fewer problems later if the problem of securing good men at the start is solved. This leads up to the question of what we mean by "good" men. The following questions relate to this: 1. Should forestry school students be hired before others? 2. Are the present Civil Service examinations conclusive tests of fitness for Forest Service work? 3. Should the people living in the forests be given preference over outsiders? 4. Should men ever be drafted into service?

None of our leaders will condemn education, but many of them share Andrew Hutton's view when he asks, "What has the taking of a college degree and the passing

MAIN THOROUGHFARE AND ITS MAJOR INTERSECTIONS

		RECRUITING
	P	
	E	SELECTION
	R	
	S	
	O	ASSIGNMENT
	N	
	N	TRAINING
	E	
	L	
		SUPERVISION
	M	
	A	OUTPUT
	N	
	A	DISCIPLINE
	G	
	E	
	M	ADVANCEMENT
	E	
	N	WEEDING
	T	
		RETIREMENT

of a technical examination to do with the shoeing of a horse, the working out of a practical management plan for the D.K. range, or the putting out of the fire in Hidden Hollow?" Reading between the lines you cannot but see that many forestry school students go out into the forests unprepared in a practical way. Some of them have never done a real days work, know nothing about getting along with men, and some know "too" much. It has been determined that the Forest Service is employing about 400 students each year and are hiring permanently an average of 57 of these after graduation, or about 25%.

From the discussions given by the supervisors in their personnel discussions it is easy to see that as a whole students are not now preferred. There seems to be general consensus of opinion that not enough practical work is given in colleges, so that the student falls down when he is put to work. In the 1929 mental test on one forest, 14 out of 16 local forest school students passed the examination, while the man who was considered "best" of the local men failed it. This shows that the student often has a better mentality.

The author, as a student, believes that the general opposition to student help in the Forest Service is unfair and unwarranted. Why do students take forestry? Is it not because they have an interest in it? Granted, some just fall into forestry without definite reasons, but is it fair to exclude forestry students because part of them

fall down? What incentives could the students have for studying forestry if they will be rejected when they apply for work? The inexperienced students could be given jobs of small responsibility until they had gained some practical experience, and then put into the more responsible jobs.

Perhaps the trouble lies with the supervisors and rangers. They expect too much of the student. The students cannot compete at once with the old timers, but they usually can learn faster and do not reach a level of advancement so soon. The employment of students may serve the following purposes:

1. Enable the Forest Service to get a line on promising material.

2. On the other hand it also allows the Service to determine the misfits, and this is often costly.

3. Through reports to the Forest School from which the student comes, minor faults may be corrected by the faculty.

4. Give the student some experience that will keep up his interest in forestry as well as to raise his rating in experience when he takes the civil service examination.

5. Give the student a chance to decide whether he wants to enter the service.

6. Maintain contacts between the Forest Service and the Forest Schools.

Now to consider the second question, "Are the present

Civil Service Examinations conclusive tests of a fitness for Forest Service work?" The supervisors in a majority say "no." In the author's opinion they are right, because there are numerous cases of men making a high examination grade and then falling down when put in the field. At the same time, men fail the examination, and yet turn out to be good foresters. The tests are not conclusive, yet they point in the right direction. The largest part of the men taking these tests make good. There is little doubt, however, but that the tests could be improved upon.

Should the people living in the forests be given preference over outsiders? In the author's opinion they should be given preference next to the students for the following reasons: a better cooperative spirit is maintained, these people know the territory better than outsiders, and they are quickly available in emergencies. Discretion must be exercised in recruiting these people; they are not all suited to forestry and are not all forestry minded.

The last question, "should men every be drafted into service?" is a hard one. The forest officers in a crisis cannot always get enough men to enlist in a crisis, and there are cases where it is nearly demanded. The main objections to this are: the men may not be interested, hard feelings may be caused, there is apt to be low morale, and the crew is usually inefficient.

Selection is the next main function in personnel

management. This refers principally to long term men since they are the most important. The objective of the Civil Service examinations has been primarily "selection." These examinations have not proven satisfactory to a high degree. They deal more with knowledge of trees rather than knowledge of men. The beginner must deal twice with men while just once with trees. This, then, is one weak point in selection of men for responsible positions. The Suislaw National Forest selects Forest School students unless special qualifications, such as ability to drive a caterpillar, are needed.

To compensate for the weakness of the examinations is the probationary periods. These are also selection processes, but they have not proven any too satisfactory. The time is just one year and this should be raised to from one to three years. Often at the end of one year a ranger is not capable of saying whether a man is good or not. Rather than do the man a possible injustice by saying "no" he will pass him. This accounts for many of the poorly qualified men holding permanent positions.

J.N. Templer gives the following factors which tend to nullify the results desired from probationary periods.

1. Incorrect placement in the first instance.
2. Inability of immediate superior to instill Forest Service ideals.
3. Lack of opportunity to train the probationer.
4. Hesitancy or timidity of Supervisor in recommending dismissal.

5. Too little opportunity to determine whether or not the probationer is gifted with that most necessary talent--horse sense.

6. Failure to impress upon the probationer when he first is introduced to the job that he is a public servant whose official work and personal conduct is governed by and subject to certain rules and policies laid down by Federal legislation and the higher administration superiors, and also by the community in which he is stationed.

7. Lack of a clean-cut description of the job itself, and the responsibilities that go with it.

The supervisors in their discussions were largely of the opinion that the man should be given chances and tests to prove his ability during this probation period. The reason for this is that no person can judge another in a short time with accuracy.

Here is an incident that proves the foregoing point. This is drawn from industry but may very well be applied to forestry to illustrate the point. Arrangements were made for 13 industrial executives of major rank, each of whom prided himself on his ability in choosing men, to meet and select the best salesmen from a group of 12 applicants. In doing so, each was directed to interview each of the 12 applicants privately, use whatever procedure or method he wished, then to rank them from 1 to 12 in the order of his preference.

The results of this experiment are shown in Table 1. The letters A to M indicate the interviewers. The Roman

numerals in the left-hand column symbolize the names of the applicants judged. The number in each square is the rank assigned to that applicant (on the left) by the interviewer. In spite of the fact that these 13 interviewers were experienced pickers of men, and in spite of the fact that they were judging the same small group of applicants, what do we find?

TABLE 1

RESULTS OF SELECTION EXPERIMENT AMONG 13 EXECUTIVES

Applicants	Firm Rank	INTERVIEWERS												
		A	B	C	D	E	F	G	H	I	J	K	L	M
II	1	5	4	11	1	4	5	3	2	1	3	7	4	8
IV	2	1	1	7	3	5	9	11	4	2	3	7	5	2
I	3	8	8	3	4	6	1	1	1	4	3	2	7	9
III	4	2	8	1	2	9	2	6	12	5	6	4	1	1
VIII	5	6	22	2	5	1	12	10	9	6	7	6	6	7
V	6	3	12	6	5	8	7	5	10	3	3	1	3	2
VI	7	7	7	10	8	2	3	4	5	8	3	3	11	4
VII	8	9	3	8	11	7	4	2	3	11	9	5	2	5
XI	9	4	6	12	7	9	11	8	6	10	12	9	12	12
IX	10	11	10	4	8	2	6	12	7	7	11	12	9	6
X	11	12	5	5	10	11	8	7	8	9	8	11	10	10
XII	12	10	11	9	12	12	10	9	11	12	10	10	8	11

The next main function of personnel is assignment. Proper placement means a great deal in the Forest Service. No two ranger districts are alike; no two forests are alike. The districts are all analyzed and the Forests soon will be, so that we already have a good basis from which to work. If the men will be studied as closely as have the districts it should soon be possible to make better average placements than have been done in the past.

The basis for assignment is found in the answer to two questions: 1. What is done on the job? (In detail, not general) 2. Can the man do it? It is not possible to please the men all of the time because disagreeable tasks are found in every job. The man must be impressed that it is necessary to do the disagreeable as well as the agreeable things, and to make the best of it. A man can do much to fit himself into an environment if he tries.

Out of the nine supervisors who discussed assignment six believed the main object to be to assign men to the jobs they are best fitted to fill. This means that the men, as well as the jobs, must be carefully analyzed. J.R. Bruckart tells of a case where a man having been assigned to a different class of work succeeded without difficulty, whereas in his former job he had failed completely and his separation from the Forest Service was being considered.

A number of the supervisors considered the nature of the job as related to the man, his family, and their social life. One supervisor states "I would be inclined to give a lot of weight to needed social advantages, even at some cost to the work, in selecting a ranger to fill any position on this forest. A married man with children to educate should not, if it can possibly be avoided be assigned to a place without school advantages. Most men thus assigned will soon become dissatisfied and the work will suffer sooner or later. Much has been done in the past in moving ranger's headquarters from isolated places to small towns. These changes have re-

sulted in better satisfied and higher grade rangers."

One supervisor thinks we have not given enough attention to scientific measurements for assigning men. He thinks that too much has been left to unscientific impressions and conjecture. A few institutions of higher learning have worked out measurements of latent ability and inclinations, which show with a great degree of accuracy, the bent of the individual, and the kind of work in which he will be efficient and happy. This method is just beginning to be used in industry. To the author this is not a sound method because men cannot be judged by written tests alone. This is shown by the failings of the Civil Service examinations. It is just impossible for some men to show their real ability in a written test.

The analyses of the job is only half of the problem. If the selection of a man is accidental, causal or transient, the Service is still shooting in the dark. Since the Forest Service must often put a new man in a position without knowing his interests and capacities there are frequent misfits found. The "trial and error" method is used, and no method could be so costly. Under the present system the period of "error" should be very short, and the man should either be removed or shifted before he will regard the change as a matter of discipline.

Another supervisor believes that with the salaries paid, the hiring agent has the right to expect that the employee take over and successfully handle the job to which he is assigned without a lot of coddling and grat-

uitous but costly education or training. This sounds rather strong. When a man takes over a job he cannot always tell if he can do it. If he finds that he cannot, he should either have training, or else be shifted to something which fits him better.

Supervisor Ralph S. Shelley of the Siuslaw National Forest said, in regard to this, "By changing men to different positions you give them a variety which some men must have. This tends to keep up their interest, and at the same time it is possible to find what a man is best suited for. A disadvantage of this system is that if a man is shifted too often he may not become very proficient in any one thing."

Right along with assignment comes the problem of introducing the new men. It has been found that first impressions are lasting and that they have a marked influence on the efficiency of the employee. The new man should get a correct, vivid, and interesting picture of the organization, with its objectives and policies. Two mistakes commonly made are: 1. To crowd the new man too much. 2. To assume the new man knows things which he does not.

If a profusion of details are thrown at the neophyte he will become confused and discouraged. General principles should be given first, and then the details gradually brought in as he becomes accustomed to the job.

Old men in the Forest Service are prone to become impatient with new men because they cannot grasp things at once. These older men have forgotten that once they

had to learn the same things.

Forestry schools are assets in introducing new men to the Forest Service. Even if the study of trees is over-emphasized student is given enough of all sides of forestry to get a clear picture of the Service. The student knows what he will have to face, or he should know. Forest guard training camps also help to introduce the new man, and the time of these should be lengthened so as to cover more of the field in a general way.

Walt L. Dutton of John Day, Oregon gives a college graduates first impression of the Service when he says, "When upon graduating the college man enters the Forest Service, one of the first things he runs onto is a supervisor run to death by all manner of administrative activities which aren't forestry at all. He sees this supervisor monkeying with allotments, with roads, with recreation, with special uses, with meetings, with attempts to get imbecile back-country stock associations to see the light, and he thinks that if this is the way the Forest Service practices forestry that what he has learned about it is of little use. He sees an enormous emphasis laid on Public Relations and Administration, but apparently little laid on the practice of forestry, so he concludes the wheel is out of round."

In selecting men for leaders, and as permanent men in the Service many factors must be considered. The "Human Estimate Chart" shown below may help in this selection.

HUMAN ESTIMATE CHART
Chart No. 2

<u>PERSONAL</u>	<u>LEADERSHIP</u>	<u>ON THE JOB</u>
Imagination	Ability to organize	Experience
Initiative	Ability to teach	Production
General knowledge	Ability to lead	Planning
Business knowledge	Ability to inspire	Thoroughness
Technical knowledge	Handling jobs	Resourcefulness
Open mindedness	Handling men	Forcefulness
Co-operation		Tact
Loyalty		Trade knowledge
Appearance		Inventiveness
Health		

Now comes the big function of training. If the Forest Service wants better men it must pay the price for training. The short term men must be trained as well as the permanent men. Different kinds of training are required for each group. A short history of the advancement of training follows.

About 1908 the Forest Service undertook to organize a series of ranger conferences or schools for the training of its field employees. Selected men were detailed at Government expense to attend these conferences conducted in camps for several weeks at a time in different National Forest Regions. The plan was admirable and calculated greatly to increase the efficiency of the organization. Unfortunately a technicality of the law prevented the use of existing appropriations for the expenses of the forest officers in attending such conferences and the plan was abandoned to the embarrassment of the Service and its work. The instructional work, however, was continued in various ways. Individual instruction of new men by the

rangers and higher officers, reading courses, and other devices were substituted.

Several of the western forest schools offered short extension or continuation courses for rangers on leave of absence; and recently means were found to bring groups of men together for formal instruction in National Forest procedures, at which time the underlying principles of silviculture, protection, and forest management are expounded and discussed.

The state forest organizations have also undertaken methods of training the field personnel. From time to time the state fire wardens in various of the states meet for a practical discussion of their problems. The State Forester circulates information of value to the men in the field and various other means are devised to increase the knowledge and stimulate self improvement on the part of the local district forester, fire warden, or others in the organization.

Different kinds of schools have been organized to meet the varying needs. These may be classified as

1. The independent schools.
2. The cooperative schools.
3. Organized training by employees.

Under the head of the independent schools are such institutions as the New York State Ranger School and other full-time instruction schools in forestry. Their work is centered about their own forests, experimental tracts, and laboratories. Ordinarily the course covers

only one year, and this brings up the fear that this may lower the standard of the profession because of some men who may want a short-cut way to training in technical forestry. These fears are groundless if the schools are really vocational in character and methods of training.

In the cooperation type of school the student alternates for specified periods between the school and the field work. It may be possible to use this plan a great deal in forestry.

The organized training by employees is a good plan where the men are banded together, like mill men, but due to the wide separation of forest employees this is nearly impractical.

Henry S. Graves believes that the best results would be obtained by vocational training conducted by the Forest Service itself. Foreign governments have found it necessary to conduct their own forest schools.

In the supervisor's discussions a few other systems of training were suggested. One system was to have several suitable training grounds or Forests, to be provided with men having a thorough knowledge of the needs and requirements of the Service; men who could pick good men in the rough and develop them.

This training might be handled in two or three steps. First, select desirable men, eliminating the unfit at the beginning. Train these men for one year, giving them

foundation work. At the end of the year the clearly unsuitable should be released and the prospects allowed to take an examination.

The second season the eligibles who had shown good should be taken to another Forest and receive a thorough training there, giving plenty of manual labor to test them for physical fitness and to test their reactions. From this group the vacancies in the organization should be filled. S.A. Nash and Boulden of Santa Barbara, California suggested this system of training.

One supervisor suggested a "Central Training Station." To the author this has two serious drawbacks: 1. It would compel the men to travel too far. 2. Only a general training could be given here since all types of forests and districts could not be represented here. For example, all the different types of fire hazards could not be found here.

Region 1 has been conducting a training school for new rangers for one month each spring. This has been of great immediate and future value to many of these men.

Now we come to the intersection of supervision. Prior to 1915 the supervision relied primarily upon discipline by fear. This system increased production in leaps and bounds, especially when the foreman was present, created a great deal of human unhappiness, developed the habit of malingering, promoted labor turnover, and depreciated the value of the wage dollar. The foremen were very autocratic;

they hired their workers, decided their rates of pay, imposed their own regulations, determined standards of conduct and performance, and fired them when they pleased to.

There has now arisen the need for the kind of supervision which will create a positive desire on the part of the worker to produce rather than a negative desire to avoid penalization for malingering. This calls for qualities of leadership in the supervision. These leaders must be able to command loyalty, to handle subordinates intelligently, to study their men to find their failings, strong points etc., to win confidence and respect, to keep open-minded, to be able to secure cooperation, to develop "esprit de corps," to develop successful and capable employees, and to do many other things. "Morale" is one big problem which they must face.

Job analyses is used in the selection, placing, training, and controlling. It might be discussed under any of these heads, but since it is a function of the executives it is placed under that division here.

Jobs have always been analyzed more or less, but the first systematic recorded analyses were made by Dr. Frederick Taylor just a few years ago. His method was to analyze a mechanical job to find the quickest and easiest way to do it. Men had learned their jobs

with rule-of-thumb methods, and they did things a certain way because it was traditional. Taylor figured that every job was done for a purpose, and that every act must contribute to that purpose better than any other act could. By his study Taylor found great wastes of energy and movements.

Evolving from this idea has come the analyses of all jobs. Analyses are being continually made of executives because it is now recognized that even these waste much time and energy. The definition, according to Tead, is: "Job analyses is a scientific study and statement of all the facts about a job which reveal its content and the modifying factors which surround it."

Now this analyses is not the mere breaking down and analyses of each part. It must consider what the relation of each part is to the whole. For example, each grazing job done by the ranger must contribute directly to one of the three objectives on Page 3-G in the Manual, and the total of such jobs must accomplish the total of objectives to the greatest possible degree and in the least possible time. If we consider each job separately we may have a list of jobs perfect in themselves, but they may be in conflict with each other and not accomplish the objective at all.

Research men have demonstrated that men do their best work when there is a definite set-up for the job against which their efforts may be measured. This does

not mean that the work should be routine and mechanical, but it means that the man should know why he is there, what he is expected to accomplish, the best known ways of getting results, and upon what basis he is to be judged. This is accomplished by job analysis which is expressed through objectives and "job specifications."

The men who make the job analyses should know service wide policies and practices, should be experienced enough to differentiate between important and unimportant details and necessary and unnecessary refinements in jobs, and should be somewhat familiar with the country involved. As the supervisor understands the forest as a unit he should analyze the rangers, and then the rangers should analyze their subordinates. Job analysis, however, requires the cooperation of the man whose job is being analyzed, as his knowledge of the job and points of view are necessary for a high class analysis. Also, if the employee participates in the analysis he will show more enthusiasm, determination, and effort in carrying out the schedules created.

A job analysis, well done, should cover the following things:

1. Furnish a logical basis for allotment of money and personnel.
2. Result in a mutual understanding of standards of work.
3. Give a ready periodical check on progress and serve as a measuring stick on accomplishments.

4. Be valuable for a budget of time and progressive travel, and control of travel expense.

5. Determine better location of headquarters and field stations.

6. Assist in classifying positions.

7. Make the objective stand out.

8. Assist in handling all phases of personnel work.

9. Disclose overlapping and duplication of work.

10. Help in discovering faulty procedure of work.

11. Show the need for machinery or other equipment on the job.

12. Assist in handling of work.

13. Indicate the need for training, and will suggest an outline to be followed.

14. Indicate the need for standardization of jobs.

15. Bring out fitness of employee for job at hand or other jobs.

16. Assist in providing more definite and satisfactory promotion policy.

17. Show need for improvements.

18. Give what the average man can accomplish.

19. After analyses is made the man concerned should have a better perspective of his job.

20. Brings out things which have been overlooked by the ranger or supervisor.

21. Produce a basis for measuring individual accomplishments fairly.

22. Define and place direct responsibility.
23. Broaden and develop the subordinate officers.
24. Help to avoid duplication of travel and waste of time.
25. Safeguard health.
26. Measure production.

As good as job analyses may seem from the above points it has a number of objectionable features. However, these analyses are a new thing and their faults should be ironed out in a few years.

One big fault is that there is a lack of training and experience in regard to making analyses. The idea was given to the supervisors who passed it on to the rangers. Analyses have only been compulsory since 1928, and there has been too much effort to jam it down the throats of those concerned. There was no training given to those who were to make the analyses, and hence mistakes were made. The idea has not entirely been sold because it is a new thing, and it is natural for people to hate to give up traditional practices for something new. However, the ranger work plans in use now are a decided improvement over the old "job lists."

The analyses place too much stress upon the time element. It tries to give jobs a certain time for accomplishment; the mens total time is planned out. This cannot work, however, because many unexpected things come up which ruin the plans. The analyses must be more flexible to take care of emergencies or peak loads.

Another fault of the analyses is that they are made too far from the seat of action. The plan is made for a full year ahead. During the year perhaps only 50% of the things planned for can be carried out. This causes a waste of time and energy, and causes the men to look with disfavor upon the analyses. One plan suggested in the discussions of the Supervisors was to make the plans for only one month ahead. This idea sounds very reasonable because it be could be made very accurate.

Now we come to output, and this function covers quantity output and quality output. Under this heading also will be placed incentives and rating methods, both of which influence the output. Supervisor Shelley stated in regard to output, "To obtain the best results the men must work because they like it. That is one thing that the Forest Service stresses; they seek to get men who are vitally concerned with the Forest Service and its problems." That is one big argument for hiring Forestry School students.

To the author quality should never be sacrificed for quantity. This does not mean that the Service should not have certain quantity standards because it must have these. In many cases the standards must be flexible, however, since working conditions vary much in Forest Service work. For example, one trail may take twice as long for construction as another of the same length due to difference in topography, brush, and other factors.

The ranger should determine if the men are getting enough done according to the circumstances.

The present Ranger work plans based upon an analyses of the job set up rather definite standards as to quantity, but not so definite as to quality, and there are wide regional variations in these local standards. It is not always possible to give the individual a clear idea in advance as to just what is "satisfactory" quality; as to just how far he should go in sacrificing quantity for quality, and vice versa; Consequently the Service does not always give him a definite target at which to aim. Some of the activities are difficult to reduce to definite standards of performance, and we are still a long ways from reducing the meaning of "satisfactory" for the total job to definite, uniform, understandable terms.

On page 40-A of the Manual it states that each year the supervisor must review the work of each employee and decide that it is either satisfactory or unsatisfactory. The supervisors hate this because it often does more harm than good. An officer who is doing the best he can, is loyal, but is not capable, is given quite a jolt when he hears that he is doing unsatisfactory work every year.

Supervisor E.D. Sandvig of Miles City, Montana suggests that "a chart or graph system be devised which would be simple of application and would give a numerical result symbolic of the whole job." This would give something to tie into the term "satisfactory."

Supervisor C.J. Olsen of Richfield, Utah states that "definite action should be taken toward the standard use of a systematic feasible method of rating efficiency that will eliminate as much as possible, human error, and give the employee the benefit of a correct rating based entirely on his merits. The work to do should be fully and thoroughly considered and other factors such as honesty, dependability, initiative, etc. given relative consideration."

A system of grading which might be used is suggested by Wm. L. Barker, Jr. of Munising, Michigan. He says "Positions could be graded. We could say--to satisfactorily fill that position a man should rate 90 in G, 80 in PP, 60 in FM, etc., and does not need to rate at all in L. Another position needs a man who rates 95 in PR, 90 in L, 80 in FM, 85 in Fire, etc., and he does not need to rate at all in G.

The discussions of the supervisors showed that they varied considerable in regard to the correct way to rate the men. The majority, however, believed that we can have certain definite standards.

The other side of the question is well expressed by Supervisor Clinton G. Smith of Athens, Tennessee who states, "No man on a job comparable to a Ranger's task can be rated with precision. We are supposed to be able to distinguish between good and bad, between right and wrong. I don't see any difficulty in distinguishing between satisfactory and unsatisfactory performance until you get to the marginal line and then we are all more or less at a loss. Keep the terms we now have, until some

one has something better to offer within the realm of reasonable appraisal of our jobs."

There are certain human qualities which will probably never be measurable in a definite way. They are abstract, and yet they influence upon the worker's effectiveness in his work. Here might be mentioned such qualities as initiative, personality, tact, cooperativeness, leadership, organizing ability, and so forth. Executives must rely upon judgement to determine the qualifications of their subordinates in these unmeasurable, yet important characteristics.

In Scott and Clothier's "Personnel Management" are given six handicaps in reaching reliable judgements upon these unmeasurable characteristics.

1. The average executive is working under pressure; he has to get the work out, and he is liable to judge a man on his production alone.

2. It is naturally difficult to think of abstract qualities in concrete terms.

3. Any spectacular instance of good or poor performance often prejudices the superior in favor or against the employee, as the case may be, to a disproportionate degree.

4. Everyone is influenced unconsciously by his likes and dislikes.

5. It is difficult to think in terms of empty air.

6. One executive does not think in the terms of another.

The purpose of rating scales is to throw light on the relative fitness of the members of a group at a given position. Rating scales are of different types--the man-to-man comparison, the numerical, the graphic, and the adjective rating. There is not as yet sufficient experience with the use of these several types to offer convincing evidence as to their relative merits.

Now we reach the intersection of incentives. Supervisor Shelley said, "The biggest incentive a man can have is the doing of a satisfactory job in a way acceptable to the man himself." Other incentives are written and spoken recognition of merits, bonuses, wages, promotions, ratings, pensions, insurance, and the promotion of the forestry spirit.

There is not a doubt but that "pay" is a strong factor in securing of good men. The pay in the Forest Service is gauged by the going scale of wages. For the short term men it seems to the author that the pay should be higher than the average because the work is only temporary and the men are laid off at a time when other work is scarce. The yearlong men receive a fair rate of pay, although the nervous strain of these men is greater than in most positions. Supervisor Perry A. Thompson said, "The man whose pay is secondary is the best man, although pay is a big factor in securing good men." Supervisor R.S. Shelley said, "Pay is of secondary importance, but there should be an increasing wage." To the author the use of increasing wages is

the best way to apply wages as an incentive.

Bonuses are used as incentives in industry, but they are not practical in the Forest Service due to the nature of the work.

That form of promotion which is perhaps most effective as an incentive is the assurance on the part of the employee that advancement and promotion depend directly upon performance. If promotions are made by personal likes and dislikes the purpose fails. There is a tendency in the Forest Service to keep a man at one position year after year if he is good at it. This may be all right for older men, but for young men it checks ambition.

Rating is a very strong incentive. Observe how college men will work to make an honorary. Just the giving of a title to a ditch digger would make the job seem better to him. The chief trouble with this type of an incentive is that the effect is only temporary, and if ratings is not followed up with an increase of compensation or higher ratings the incentive is of little permanent value.

Pensions and insurance are two incentives used much in industry, and the Forest Service should use these in order to be on par with other organizations. Men are turned out of a job when they are old enough not to be able to work very much, and yet they are apt to live for many years. Who wants to look forward to poverty in old age?

The promotion of the forestry spirit is one incentive

upon which the Forest Service has largely relied upon. It is an excellent incentive and should be continually stressed. Bloomfield, in his Problems in Personnel Management, states, "Activity of body or mind is not intrinsically objectionable to human beings. On the contrary, if the activity is within the individual's capacity in quality, quantity, and duration, so as to be done without strain, it is intrinsically desirable. Boys and men leave their farm chores to engage in more violent activity in hunting. The lawyer stops thinking of his brief in order to think harder in a chess game." If the Service can get men to work because they like it, it will need to offer few other incentives.

The intersection of discipline is one which merits close attention. It is the duty of the executives to give orders, to see that they are enforced, and to reprimand violators. In Tead's Human Nature and Management are given a number of injunctions which may well be used by executives.

1. To avoid negative in favor of positive commands, which are explicit and arouse interest.
2. To give as few commands as possible.
3. To let those commanded understand the degree to which they are to use their own initiative in carrying out orders.
4. To be sure that the commands are understood; this involves the important work of setting forth clearly in

language that those commanded understand, what is to be done--it is not sufficient that the command be clear to the one who gives it.

5. To give in private any reprimand which has to be given for failure to carry out an order.

6. To give commands without the use of sarcasm or of ridicule.

7. To use the right tone of voice in giving commands. The tone of voice in which commands are given is exceedingly important--to be firm without overbearing; to be pleasant and cheerful without seeming to take the matter too lightly; to be personal without being overbearing--all this requires the employment of a tone of voice and total bearing which deserve special thought.

The above points are very inclusive so that very little more need be said. Discipline in the Forest Service is much different than in industries due to the wide separation of the men. Less direct overseeing and more dependence upon honor must be used. In cases of bolshevism, shirking and the like, one warning should be the maximum, and often it is best to promptly dispose of the offenders.

Advancement is a difficult intersection in the Service due to the fact that advancement is very slow. In order to have a workable system of promotion the entire line in an organization should move ahead at the same time. That is the ideal, of course. The

Forest Service is too static; that is, it does not promote its men fast enough. By remaining in one position so long the men get into a rut and that is a negative incentive.

Upon what merits should the men be advanced: A definite system of points for efficiency and results, plus consideration of a man's character and personality is a logical basis.

Weeding is important, and yet it is dangerous. It is important because the Forest Service does not want inefficient, incapable, untrustworthy, and troublesome men in its ranks. It is dangerous because it is apt to cause serious enemies and even incendiaries.

The bolshevick, shirker, and untrustworthy man cannot be tolerated. These types of men should not be given more than one warning, if even that, and great care must be taken in their removal. In other words, tact must be used.

Inefficient and incapable men, if incurable, should be relieved after being shown just where, how, and why they have fallen down. There should be no reprimand in these cases, but only an effort made to give the man the facts and reason with him.

Just where should be the line for eliminating the inefficient and incapable? If certain standards are set this is easy, but under the present system it is mainly a matter of personal opinion.

Supervisor R.S. Shelley of the Siuslaw National Forest related to the author the story of a man who was unsuited for forestry work. He related: "A boy came over from Germany to work in forestry here. He passed the ranger examination very well, and he had very much ambition. The boy finally had to resign, the chief trouble being that he could not understand men. This ability to understand people is a very fruitful source of trouble in the Forest Service because many of the employees are but meagerly educated."

Mr Shelley said that he had never seen a person so ambitious who yet failed to succeed. Mr. Shelley talked with this boy time after time but could not show him what was wrong.

Another case of weeding was given, this being due to superficiality. "A certain man stood at the head of the eligible list when hired. He was a fine chap, and had a very keen mind. In his work, however, he depended too much upon his native ability. I thought that probably he had made good grades in school without much effort. I outlined the man's faults, finding ten specific things in which he had fallen down. The man admitted these faults and resigned before the end of the probation period."

The last intersection we come too is "retirement." This is not a large personnel function in the Forest

Service although it must be dealt with. Much of the work demands heavy physical labor, and when a man gets too old, or incapable of doing the work, he should be released. The humane side of the question cannot be too greatly considered since the Forest Service is a government institution and must be run on a business basis.

No definite age for retirement should be set, and the personal relations between the executive and employee should not be allowed to influence the retirement of a man. Pensions would be a very desirable thing. They would be strong incentives for a better organized personnel.

This thesis has attempted to show the importance of personnel problems in the Forest Service. It has traced a brief history of personnel management from the ancient Egyptians down to the present. It has given the trend of the work in recent years. It has listed the major personnel functions of recruiting, selection, assignment, training, supervision, output, discipline, advancement, weeding, and retirement, and has shown many of the problems connected with these functions. No directions for specific personnel problems have been given, but only the broad general rules which hold true in most of the specific cases. After all, the settling of local problems must be done in different ways as the needs arise.

As time goes on, no doubt personnel problems will

take a more major position than they now hold. One supervisor said that four-fifths of the Forest Service work was directly or indirectly associated with personnel work. If this is true, then the importance of personnel research may plainly be seen.

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