

Meeting of Western Experiment Station Directors
Las Cruces, New Mexico
May 19-22, 1954

The meeting was called to order at 8:50 a.m., May 19 by Chairman Sharp in the Student Union Building of the New Mexico A and M College. Curry made announcements relative to activities that had been planned and explained modifications of the agenda that had been released.

Those present were:

- P. F. Sharp, Chairman, California
- H. M. Briggs, Secretary, Wyoming
- A. S. Curry, New Mexico
- R. A. Nichols, New Mexico
- F. E. Price, Oregon
- R. W. Henderson, Oregon
- M. T. Buchanan, Washington
- P. S. Eckert, Arizona
- S. S. Wheeler, Colorado
- J. E. Kraus, Idaho
- R. H. Walker, Utah
- B. H. Crandall, Utah
- C. G. E. Fleming, Nevada
- M. M. Kelso, Montana

- J. G. Knapp, FCS, USDA
- A. H. Moseman, ARS, USDA
- H. C. Trelogan, AMS, USDA
- Hazel Stiebling, ARS, USDA
- H. C. McPhee, ARS, USDA
- G. F. Hilbert, ARS, USDA
- Raymond Price, FS, USDA
- R.W. Trullinger, OFS, USDA

USDA
Representatives

Moseman

Crops research was discussed by A. R. Moseman of ARS. Program plans were reviewed and increases for research in horticulture and entomology were indicated. In the former a \$100,000 program in nematology is contemplated that will provide help on identification and research on nematocides. Ornamental crops will receive increased support; specific studies are planned on mildews in rose and on viruses of gladiolas and other bulb crops. Antibiotics will be studied in control of bacterial and virus diseases. Pesticide residues will be examined for their toxic effect on plants, soils, and consumers. It is hoped that in the future forage crops research can be expanded as an aid to grassland agriculture, with attention also being given to weed and brush control and the containment of halogeton. Virus diseases of stone fruits are becoming increasingly important and there is need of virus free root stocks. New crops studies are needed that will give us needed production that will not be in competition with existing crops.

Insects (crop pests) are developing resistance to insecticides. Systemics have proven promising in cattle, but residues are a problem and shorter lived formulations need to be developed. Increased building space is needed to adequately conduct research and for the storage of germ plasm stocks at Fort Collins, Colo.

The feeling was expressed that USDA should get out of field station operation and tie in with state stations. Some that have a special facility and are adequately staffed probably should be retained.

It is difficult to draw a line between ARS and Forest Service research; in general the former has jurisdiction in open lands and the latter in wooded lands--overlapping areas still present a problem in working out reorganization.

Price

Price of the Forest Service pointed out that originally it was planned that the Great Plains area should be under ARS jurisdiction and that the Jornada was included as Great Plains, since it was year-long grazing. Function was also considered with the areas west of the Great Plains divided with (1) reseeding and (2) plant control being transferred to ARS. Management of both reseeding and plant control was left with the Forest Service.

Moseman indicated there is no objection to ARS, the State Station, and the Bureau of Land Management working together on re-seeding.
of

MCPhee

Livestock research in ARS was discussed by MCPhee. The work of the former zoological and pathological branches have been put together. Beef cattle research discussion was postponed until a later time. Disease research money was requested and less than \$300,000 has been designated for work in trichomoniasis, vibriosis, and dwarfism; the work will be done in the Animal Husbandry and Poultry Branch. Dwarfism studies will be conducted in cooperation with the states. Vibriosis work will be largely on a cooperative basis with ARS tying in where work is underway. Work on trichomonads will also be largely cooperative with the states.

In the new budget, disease work will again be stressed, but attention will be given to breeding. Blue Tongue of sheep, with emphasis on diagnosis, vaccines, etc., should be emphasized--the branch laboratory will probably be at Denver.

Field station work was mentioned with objection having been raised to the curtailment of work on rabbits. It seems desirable for the states to own the animals on field stations. A new lease is in process of preparation for the Southwest Sheep Laboratory at Fort Wingate, New Mexico. The program at Dudois is coming along well; the attitude of collaborators at the last meeting was excellent with their suggesting flocks at state stations as a future consideration. Major installations are needed at East Lansing (poultry diseases) and the Beltsville disease facilities should be rebuilt.

Leptospirosis work needs to be done at Denver and Beltsville.

A policy is needed on the utilization of data that may originate across state and regional lines.

Ownership of female dairy animals has remained with the USDA, and the problem is arising as to inventory transfer of breeding stock in dairy as well as in other lines--the possibility of disease or other disaster needs to be considered.

Stiebling

Dr. Stiebling reported on research in human nutrition and pointed out that in reorganization, new functions were added and none taken away. Formerly, they operated in four divisions and they are now operating in two branches (nutrition and home economics) with each branch divided into four sections. They plan to continue cooperation with state and regional groups. Forty states have been involved this past year in cooperative studies.

Nutritional research has been emphasized with the North Central and Western regions and the work is to be expanded into the Southern region. Studies now underway on utilization and consumption were outlined. Farm and home planning programs were discussed and the lack of research on which to base decisions was indicated; alternate uses of time and energy must be considered in expending money for goods and services. Exploratory studies are underway in studying how research data is put into use by the different income groups.

Hilbert

Utilization research changes were mentioned by Hilbert. Dr. R. T. Milner has resigned as Director of the North Laboratory and has been replaced by Dr. W. D. Maclay from the Western Laboratory and Dr. Walcott has been moved up to replace the latter. Dr. W. F. Talburt will become head of the Fruit and Vegetable Utilization as a replacement for Walcott. Dr. M. J. Copley is recovering and will be back as Director of the Western Laboratory in a short time.

Functions in utilization research have remained unchanged but dairy utilization and phases of meats research units have been transferred to them and will be known as the Washington Branch.

Collaborators from state stations will be continued and the Western Directors are urged to continue an annual meeting at the Regional Laboratory. Meetings of collaborators in the East on methodology and in the South on crop and feed research were held during the year. It was pointed out that scheduled trips of all collaborators has advantages over individual visits.

The utilization of animal fats in livestock feeding has led to drastic rises in prices of inedible fats.

Contracts for research are let from the regional laboratories and restrictions have led to problems with commercial laboratories and pressure from certain commercial interests.

Motor fuels are being studied in the Western Laboratory with special emphasis being placed on the use of alcohol produced from grain as motor fuel. A matter of policy rather than technique is involved.

Increased funds have been requested for work on cotton, wool, oils and fats, corn, wheat and dairy products.

Recess was at 12:00 noon and this meeting was called to order, again, at 1:15 p.m. Those not attending Rotary were the guests of the New Mexico Station at a cafeteria luncheon.

Trelogan

The organization of the Agricultural Marketing Service was described by Trelogan and personnel lists were distributed and functions briefly described. It is hoped to expand cooperative work with state agricultural experiment stations. It is planned to put additional emphasis on marketing research, making that rather than other functions the primary activity of the staff. If increased funds become available, it will be difficult to find well trained staff as states will be after the same people.

Price

Price, of the Rocky Mountain Forest and Range Experiment Station at Fort Collins, Colorado, represented Dr. Harper, Assistant Chief of the Forest Service in Charge of Research. They now have four range experiment stations in the West; these are (1) Rocky Mountain Station at Fort Collins, (2) Intermountain Station at Ogden, (3) Berkeley and (4) Portland. These replace the six they had and limited funds made the reduction in numbers necessary--operational expenses had increased. There are now six areas of research instead of three.

Increased cooperation with states and industry has allowed some spreading of activity. Some of the effects of reorganization were previously mentioned.

Watershed research is difficult to segment and includes (1) re-seeding, (2) range management, and (3) plant control. Forest morphology and forest entomology have been moved into range management research; pathological and entomological work have been brought into the same laboratories and are related to silvaculture and ecology.

Increased funds will be used in genetic studies, reforestation and fire control research--work is expected to be expanded on the control of forest insects. Cooperative aid will provide the opportunity for the Forest Service to contract for research, but funds were not increased for that purpose. Such funds should serve as a "catalyst" in furthering the total research on forest problems.

There are three branches to the Forest Service: (1) National Forest Administration, (2) State and private forestry, and (3) Forest research. Land use lands are now a responsibility of the National Forest Administration and will be handled in the manner of grazing districts. The disposal of L.U. lands is being considered, if and when "organic" legislation is passed.

Knapp
Knapp

Dr. Knapp discussed the Farmers' Cooperative Service and described the nature of the service which is new in name but old in function. Originally they were a part of the Bureau of Agricultural Economics and did research, rendered service and carried on an educational program in the field of cooperative activity. Functions changed, with lessened activity then renewed activity in research, as their administrative connection was changed from agency to agency. The new pattern provides for grouping of activity into three areas (1) Cooperative Marketing Division, (2) Purchasing Division for the Cooperative Services of Insurance, locker plants, etc. and

(3) Management Division, that will be related to patterns that make for success in cooperatives. There will be a transportation branch that will be integrated with marketing and purchasing; also there will be a branch responsible for statistical studies.

There are over 10,000 cooperative associations in the United States doing varying volumes of business with 87 per cent of them working with the Service at present. About 100 research projects are underway and quarterly reports are being issued by the different branches. There are fifty-one of the current research projects that are in cooperation with Land Grant Colleges. Cooperatives have had salary scales that are low as compared to persons rendering similar service in other organizations. Cooperatives are putting about \$1.00 into research for each \$3.00 being put in by Cooperative Service so the effectiveness of limited funds is being somewhat multiplied.

A monthly publication is available on request. There are stronger and better cooperatives today than formerly, but adversity increases interest and interest is anticipated in the future.
renewed

Trip about
Campus

The meeting recessed at 3:00 p.m. to visit laboratories and experiment plots. Those visited were the Wool Laboratory, Cotton Gin and Laboratory (Coop. USDA.), and Agronomy Farm.

A dinner was enjoyed at the college cafeteria at 6:30 p.m.

The meeting reconvened at 8:40 a.m., May 20.

National
coordinator
for beef
breeding
research

Sharp mentioned that apparently the thinking in locating the national coordinator at Denver had been that the man would be near the center of his work. It was pointed out that Kelley had been moved, in the soils program, in what was a similar attempt to concentrate administration at a central point. Sharp pointed out that relative to the beef cattle problem, we should not confuse what might be personnel problems with what should be considered organizational policy.

McPhee commented the situation was complex and outlined previous developments that had led to the establishment of an office at Denver. McPhee stated that Shaw's idea of having the top men available in Washington for consultation was proving sound and hence a suggestion to move Clark to Washington had been made, where he would be in charge of beef cattle breeding, and work under Madsen, who is in charge of all beef cattle work. McPhee specifically asked for a recommendation from the directors as to who should be the coordinator for the Western Region. Curry asked if anyone had "spelled out" just what the coordinator's job is. McPhee answered that a statement had been prepared.

Walker suggested we leave the matter of coordinator up to the appropriate administrators in ARS. Wheeler observed that in the future the coordinator of the Western Region should act as such for the entire W-1 project and not to act as leader for the project or any one portion of it.

Minutes of Buchanan moved we approve the minutes of the last meeting
last meeting as distributed. Eckert seconded and the motion was approved.

Report of
WAERC

Eckert mentioned there had been a meeting held this past spring and another was planned.

Committee
of Nine

Kraus outlined several actions taken by the Committee of Nine and mentioned all suggestions had already been passed on to the administrative advisors. WM-2 and WM-5 have been recommended for termination as of June 30, 1955. WM-4 should be revised or discontinued, since it is so very broad in scope. There is considerable misunderstanding as to what a regional project should include--should it be broad or limited in scope; a recommendation may be forthcoming. The term "sub-project" is probably being used as synonymous with objective. Regional projects should carry at least some statement or detail of procedure and should also carry background information on the present status of the problem. The problem of reporting on projects in the process of being closed and new work underway in the same field should be clarified to reduce confusion.

Motion to
ESCOP

The inter-relationships of 9b3 marketing research and Title II was discussed. Buchanan moved the western directors recommend to ESCOP that they ask ESMRAC to review marketing projects along with Title II projects, and that ESMRAC make recommendations relative on all marketing projects to both the Committee of Nine and OES with functional details to be worked out. Walker seconded the motion and it carried.

Representation
on Technical
Committees

Sharp mentioned the problem of paying expenses of more than one representative from a Station to a meeting of the technical committee. Trullinger pointed out the directors had an obligation to get the job done. It was agreed that while travel expenses would be paid on only one representative of the station as a general procedure, when coordination or other considerations make it advisable, prior approval on the recommendation of the technical committee, and approval of the administrative advisor can be obtained for others to travel on the trust fund.

The meeting recessed at 12:15 p.m. and we were guests of the New Mexico Experiment Station at a luncheon in the cafeteria. Committee work was resumed at 1:00 p.m.

Report of
ESCOP

The matter of state coordination in soils research was mentioned. It was reported that no model agreement was desirable. The respective experiment station directors may wish to appoint state committees consisting of (1) station, (2) extension, and (3) SCS personnel to consider soil research needs.

It was mentioned that publications of broad or regional nature should be made after federal agencies have been notified of intent. This is a matter of mutual consideration, care and understanding.

The National Science Foundation is taking their coordination assignment "seriously" and are not satisfied with reports as available from OES. ESCOP feels they should take the type of report they are now getting. States other than the six now cooperating on furnishing additional reports should clear with ESCOP before furnishing such.

Legislative
committee
report

The subcommittee of ESCOP on legislation met with the Senate Committee on Agriculture Appropriations. It appears the Senate will pass the bill on agricultural appropriations as forwarded to them from the House.

The committee has adopted a motion that approved the asking of an \$8.5 million increase over that asked for 1955. This will bring the total to the \$20 million figure

There will be an opportunity to submit more Title II projects if increased funds become available.

Committee on
soil survey

Walker has been suggested as a continuing representative on the Soil Survey Committee. A suggestion has been made to proper authorities as to future procedure on Soils Surveys.

Report from
ESMRAC

There was \$268,000 allocated on marketing plus \$28,000 carryover or a total of \$296,000. There will be \$252,000 committed for the new year with \$500,000 available. There was \$297,000 in new requests with \$248,000 to cover the requests; all western requests were recommended for approval.

The western group has been cautioned to be sure there is a lot of coordination on the "consumer acceptance of beef" project. The Committee feels the projects coming in are an improvement over previous projects. They also are of the opinion they should give preference, as long as funds are limited, to studies under section 203a. The new secretary of the Committee will be named by OES.

Report from
OES

Dr. Trullinger mentioned that Assistant Secretary Coke had commented about the continuance of OES. The office has performed a function for a good many years. No descriptive charts are available and no notice has been made to experiment station directors of any changes that may be contemplated. Mail not addressed to specific persons may not be delivered promptly.

Relationships
with OES

Briggs read a letter he had received from M. R. Clarkson, Acting Administrator of ARS. Curry and Walker both expressed the opinion that OES should not be too closely coordinated with other ARS services. Eckert suggested the Chairman appoint a committee to draft a letter to be read to the group tomorrow. Buchanan, Eckert and Briggs were named by the Chairman. The group later presented a letter and it was decided that the Chairman should send the letter, with modifications he might care to make, to Volk, Acting Chairman of ESCOP.

Report from
Grasslands
Committee

Briggs reported there had been no meeting of the Grasslands Committee since we last met.

Seed Policy
Committee

Kraus reported the seed policy is being prepared for distribution to directors by the national committee.

State-Federal
relations

Eckert commented that most matters had previously been mentioned. It is hoped that improved cooperation can be obtained with the Forest Service. The matter of federal agencies taking credit for work of state origin was mentioned; it is hoped reciprocal credits can be achieved. Sharp mentioned that pressure groups often use the "old trick" of working on two or more agencies and that liaison should be sought so there will be only one program.

Project
reports

W-1

Wheeler mentioned many aspects of the W-1 project had previously been discussed but pointed out considerable progress seems apparent. Different techniques are being employed in measuring growth and performance. Hereditability studies and systems of matings are being studied.

It was suggested that Wheeler or some other administrative advisor of the regional beef breeding projects call administrative advisors, chairman of technical committees and ARS representatives together during the American Society of Animal Production Meetings and consider mutual related problems. Publication, particularly when regional data is to be used in a release at national levels should be especially considered.

W-6

Kraus pointed out there is some difference of opinion among committee members of W-6 as to how funds should be spent. The feeling some is that testing work should be on new crops or a series of new crops and not confused with W-23. There is need for preliminary evaluation (screening) of new crops in various areas--much testing or further evaluation probably should be done by the states on their own. The idea was expressed by Sharp that W-6 should be a "bank." It was decided the Arizona project be revised to conform to the "spirit" or intent of the regional project as envisioned by the directors.

W-11

Curry reported all contributing projects are in and plans were made for the distribution of funds at the last meeting.

W-12

Kraus reported the project in order.

W-16

Fleming stated the project is making satisfactory progress.

W-22

Kraus commented the project was ready to go.

W-23

Henderson stated the project was in order and liaison had been effected with the North Central group. He requested the following statement be included in the minutes: "In recognition of contributions

made by Washington and California the NE-10, the Forage Crops Technical Committee voted that up to \$250 be allotted each to Washington and California. This is a token payment for work done by these states in evaluating for seed production certain alfalfa clovers developed by NE-10."

W-24 Eckert reported there was no special report to make but that satisfactory progress was evident.

W-25 Fleming reported that all twelve contributing projects had been approved by the technical committee and that the study was ready to go.

W-27 Kelso commented that project was read: when funds were allotted.

W-28 Walker mentioned the participation by states in the W-28, W-29,
W-29 and W-30 projects. The allocations now in existence by states were
W-30 distributed and discussed.

Walker reported that the three projects were approved and were ready to go July 1. The committees all met together and then divided into groups; each then reported to each other. It is hoped to keep the projects closely coordinated by having a common meeting time and place. There is an insufficient amount in the respective trust funds.

WM-2 The technical committee plans to meet in the near future in Denver to close out the project.

WM-4 Wheeler mentioned the project had been the subject of considerable discussion. There are two possible projects or subprojects in the "mill." One is based on market information channels and the other on sheep marketing. The chairman of the technical committee is retiring, but has polled the technical committee for ideas--eight were in agreement on general organization and two were not satisfied and two did not reply. It appears the project needs scrutiny.

Kraus stated he thought the project should be closed and that there should be a new project rather than a revision, if further work is needed in the field. Kelso pointed out the project has been discussed pro and con in WAERC; he expressed the feeling that work in livestock marketing should be confined to more narrow limits with a specificity that could lead to a termination point. Wheeler pointed out we could get conflicting reports from WAERC and technical committee members; he suggested that it would be possible to have the project so limited its value might be lessened. Discussion followed.

Kelso moved that the technical committee be instructed to close out WM-4 by June 30, 1955 and they be instructed to prepare a replacement project or projects in the field of livestock marketing that are a more specific nature and that lend themselves to a determinable completion date. The project(s) is/are to be prepared and mailed by October 15, 1954. Buchanan seconded and the motion carried.

WM-5 Briggs reported the technical committee would like to continue work on wool marketing along a specific approach that would prepare wool on definite objective standards. Walker moved the committee be instructed to close the WM-5 project June 30, 1955 and prepare a new project and submit it for consideration of the directors by October 15, 1954. Eckert seconded and the motion carried.

The meeting recessed at 4:30 p.m., May 20, to be the guests of the New Mexico Crop Improvement Association at the Charmant Cafe in Juarez.

The meeting continued at 8:30 a.m., May 21.

WM-7
WM-18

The project WM-7 is to be closed June 30, 1954, and WM-18 will be activated.

WM-12

Buchanan stated the technical committee of WM-12 had met. Wyoming was not represented and they and Utah have not submitted projects and should send them in.

WM-16
and
Khapra
beetle

Eckert commented the Khapra beetle is one of the most destructive grain insects in some foreign areas and is now in the United States. It can be a household pest, as well as a destructive insect in grains; its habits allow it to spread rapidly and is very difficult to control. Sharp read a letter from the California Department of Agriculture under date of May 12 to the head of the Entomology Department of the California Experiment Station. Sharp commented that we were preparing to study insects in stored grains and now this problem has arisen and should be considered by someone. Henderson pointed out that the states where this problem now exists are not participating in WM-16.

Trelogan suggested there was danger of the insect raising regulatory trade barriers between states. An attempt will be made to control the spread to other areas. No funds are available from the Incipient Pest Control Act because an emergency has not been declared.

Eckert moved we ask AMS to start research work on the control of the Khapra beetle and to work with the states where the insect now exists or is later found. Curry seconded the motion, discussion followed and the motion was affirmed.

Kelso suggested we increase P&C funds for travel so states in the region can be active on the problem. Representatives from Texas and AMS should also be invited to participate in the considerations. A meeting of Western Slope entomologists will be held in Bend, Oregon, in late June. Henderson was advised to get the WM 16 representatives or other entomologists together, as well as representatives from other interested states and agencies, to meet at Bend to discuss the problem. Buchanan pointed out studies on this particular pest may be quite aside from marketing and may necessitate a new project.

WM-16

The P&C fund on WM-16 was adjusted to a figure of \$1,000 with reductions in state allotments of \$200 for Idaho, \$200 for Washington and \$100 for Oregon.

WM-17

Price moved we approve the WM-17 project as revised; Buchanan seconded and the vote was affirmative.

WM-18

Eckert moved approval of the revised master project for WM-18. Buchanan seconded the motion which carried.

WM-19

Buchanan moved approval of the revised WM-19 project; Wheeler seconded; motion passed.

WM-20

Kelso is to get the WM-20 project in shape for approval--sending outlines to directors in the very near future for approval. The project is due in the OES office by June 1.

Allotment
Adjustments

W-7

Wheeler moved participating states get \$2,250 and P & C get \$500 as recommended by the technical committee. Walker seconded and the motion carried.

W-4

W-11

Readjustments recommended by the administrative advisors were approved for projects W-4 and W-11.

W-29

W-30

Adjustments were made to bring California into projects W-29 and W-30 at a level of \$2,000 each with reductions in states that had increases.

IR
Projects

The Committee of Nine, according to current policy, could designate not to exceed \$37,500 of 9b3 funds for inter-regional cooperation. Our total in fiscal 1955 is to be \$697,637 or could be reduced to \$688,450, since the West's share for inter-regional cooperation could be \$9,187, according to present formulas.

Approval
of budgets

Kraus moved that all adjusted totals in W and WM projects be approved. Kelso seconded and the vote was affirmative.

Direction to
Committee
of Nine

Buchanan moved that the Committee of Nine members be authorized to make any required adjustments; Eckert seconded and the motion carried.

Inter-regional
proposals
for 1956

Kraus stated he thought we should continue to think of the virus-free fruit repository as a possibility for an inter-regional project.

Wheeler pointed out the Great Plains Council overlaps North Central, Western and Southern regions and various inter-regional problems of the area should be considered.

Kraus mentioned that such proposals as we may want considered for 1956 must be ready for the September meeting of the Committee of Nine.

Walker moved we be prepared to propose a virus-free deciduous fruit depository as an inter-regional project and that we ask USDA to cooperate to the extent of sharing one-half the cost. Price seconded and discussion followed. Kelso reiterated the need to consider Great Plains problems as prospects for inter-regional consideration. Further discussion ensued as to how such projects should be inaugurated. Wheeler asked whether or not a Great Plains Council proposal would be considered if one were presented. Opinion was expressed that it would be. The question was called for and the motion by Walker carried.

Needed
expansion
in 9b3
research

Sharp pointed out we needed to be thinking of areas in which 9b3 research would be expanded, if requested increases for 1956 are realized. As a tentative suggestion, the western directors indicated increases in the following areas of work if \$8.5 million increase is available, and prorated reductions for lesser totals.

Water and soil conservation and management	\$150,000
Reducing marketing costs and increasing consumption of agricultural products	170,000
Reducing losses from insects, diseases and other pests of plants and animals	100,000
Increased efficiency in livestock and crop production	110,000
	<hr/> \$530,000

Soil conserva-
tion nursery
at Pullman

Buchanan reported that ARS had stated they could do nothing about financing the nursery at Pullman, the W-23 committee did not choose the take over the problem, but the Governor of Washington had made \$22,000 available. An agreement has been submitted to SCS, but they have taken no action, so nothing has happened to conclude the transfer. They will probably not act until it is known whether coming appropriation will permit them to carry on the program.

Summer
meeting
1955

It was moved by Henderson that we plan on meeting between mid-June and mid-July in Colorado and Wyoming. Kraus seconded and the motion carried.

Election of
officers

Kraus and Walker were nominated for the chairmanship and Kraus was elected by ballot. Henderson was elected secretary.

Vote of
thanks

The secretary was instructed to convey a unanimous vote of thanks to the New Mexico Crop Improvement Association, the Director and Assistant Director of the New Mexico Station and their wives and to the President of the College for the hospitalities extended.

The meeting adjourned at 5:30 p.m. and on the morning of May 22, a bus tour of the college ranch was enjoyed.

H. M. Briggs
Secretary