Report Library

An Appraisal of Advancement Opportunities and Salary Levels in the Canadian Wildlife Service

In the last few months two major changes which promise to have far-reaching effects upon the future advancement of civil servants have been implemented by the Federal Civil Service. These are the institution of collective bargaining and the new classification system for professional research workers. The extent to which these developments, particularly the new Scientist classification, will affect the biologists of the Canadian Wildlife Service is as yet not entirely clear. In view of this uncertainty it would be well for us to examine our present position carefully and, if remedial action appears warranted, to be prepared to state our case clearly and convincingly when the opportunity presents itself.

Before proceeding to the documentation of existing salary levels and advancement opportunities it would be well to consider briefly the present employment outlook for biologists in general and wildlife biologists in particular.

Rapidly awakening public interest in wildlife as an important renewable resource for recreational use has stimulated a marked expansion in programs of wildlife management and research at both the federal and provincial levels. Dr. J. M. Speirs in his report "Manpower Needs in Canada for Biologists in the Fisheries and Wildlife Field", given at the 1962 meeting of the Canadian Society of Wildlife and Fisheries Biologists, estimated that during the period from 1962 to 1971 at least a 50 percent increase in staff would be required by agencies employing wildlife biologists. If the 40 percent increase in staff scheduled for our Service in 1965 is at all indicative of the trend it would appear that Dr. Speir's estimate is extremely conservative.

Employment opportunities for biologists with wildlife training are by no means limited to government agencies. Those with graduate training to the Ph.D. level are qualified to teach many biological subjects, including ornithology, mammalogy and ecology, at the university level. According to data presented in Professional Manpower Bulletin No. 13 published by the Department of Labor in December 1962, 23.6 percent of the biologists in Canada are employed by colleges and universities and 67.5 percent by government agencies. The anticipated growth in staff requirements at colleges and universities between 1962 and 1964 was almost double (9.0% to 4.7%) that of the government agencies but the five-year growth estimate for these two categories is almost equal (34% to 32%). The magnitude of the need of Canadian universities for new staff is revealed in an article by Beatrice Riddell which appeared in the January 9, 1965

issue of the Financial Post. In it she refers to an estimate by the Canadian Universities Foundation that 2500 university teachers (in all fields) will be required by Canadian universities in the fall of 1965. Biology is listed as one of the fields in greatest demand.

Teaching of high school biology is an important source of employment for biologists not qualified to teach at the university level and there appears to be an increasing emphasis in the schools on the teaching of conservation and related fields. Saskatchewan, for example, has recently adopted a new biology text which is strongly oriented toward ecology. Biologists with a wildlife background are well qualified to teach such courses.

At the present time a biologist with wildlife training, particularly one with graduate training, has little difficulty in finding suitable employment and there is little to suggest that the situation will be materially altered in the near future. We thus have what is essentially a seller's market as far as wildlife biologists are concerned with agencies competing for their services.

Many factors can affect an organization's success in competing for staff and these may include such items as geographical location, type of work, fringe benefits, etc. In the final analysis, however, the amount of remuneration offered and the opportunities for advancement are usually the two major considerations. The importance of competitive salaries in securing and holding staff is well expressed in an article entitled "Academic Salaries in Canadian Universities" which appeared in the October 1964 issue of the Canadian Association of University Teachers Bulletin. The pertinent passage is as follows: "If the non-university field of employment is relatively large, any salary differential will quite quickly be reflected in a corresponding differential in the quality of the staff that can be attracted and retained. If university salaries lag very far behind those in a competing profession it becomes very difficult indeed to expand the university staff in the field in question". This statement is equally valid for governments, industry or any organization which must hire employees on a competitive basis.

Documentation of the existing salary situation for biologists employed in wildlife work, education and other lines of research has been obtained from the following agencies.

1. Newfoundland Resources Branch, Department of Mines, Agriculture and Resources.
2. Prince Edward Island Fish and Wildlife Division, Department of Industry and Natural Resources.

3. New Brunswick Fish and Wildlife Branch, Department of Lands and Mines.
4. Quebec Wildlife Service, Department of Tourism, Fish and Game.
5. Ontario (a) Fish and Wildlife Branch
   (b) Research Branch, Department of Lands and Forests.
6. Manitoba Wildlife Branch, Department of Mines and Natural Resources.
7. Saskatchewan Wildlife Research Division, Department of Natural Resources.
8. Alberta Fish and Game Division, Department of Lands and Forests.
9. British Columbia Fish and Game Branch, Department of Recreation and Conservation.
10. National Research Council of Canada.
11. Fisheries Research Board of Canada.
12. The Canadian Association of University Teachers.
13. The Saskatchewan Teacher's Federation.
14. Central Saskatchewan Technical Institute.
15. Ducks Unlimited (Canada).
16. U.S. Fish and Wildlife Service, U.S. Department of the Interior.

Nova Scotia is the only province from which data has not been received but it is expected that the necessary material will be forthcoming as soon as their current reclassification program is completed. Pertinent data for each agency have been summarized in Tables 1, 2 and 3 but a more complete resume of the information provided by these agencies is contained in an appendix to this brief.

The major problem in attempting to compare salary scales and advancement opportunities between two or more agencies is the difficulty in fully equating different class or grade units. The situation is, in fact, so complex that this method was abandoned in favor of using a factor which is a common denominator at all class levels in all organizations, i.e., minimum educational requirements. The approach used in this study has been to attempt to answer the following questions for each agency and to compare the results.

1. How far can a man of average ability and application, and possessing a (a) Bachelor's, (b) Master's and (c) Ph.D. degree, advance before his progress is retarded either by a reduced number of staff positions or by requirements for special ability or greater educational qualifications?
2. What will his earnings be at the start and end of this period?

Initially I also intended to compare rates of advancement and such rates, based on the number of increments in each class, have been computed and included with the other data. After due consideration, however, I concluded that advancement

Table 1. Comparison of Advancement Opportunities According to Educational Qualifications - Canadian Wildlife Service and Provincial Wildlife Agencies

A. With Bachelor's Degree

Agency	Class Level		Salary Range	Years to Achieve Limit[b]	No. of Positions in Classes Involved
	Start	Limit[a]			
Canadian Wildlife Service	I	III	4680/9000	13 1/2	29
Newfoundland Resources Branch	I	II	3700/6600	10	4
P.E.I. Fish & Wildlife Division					(c)
New Brunswick Fish & Wildlife Branch	I [d]	I [e]	6636/8076	5	2
Quebec Wildlife Service	I	IV	4200/7000	10	18
Ontario (a) Fish & Wildlife Branch	I	III	5250/9000	10	46 (g)(f)
(b) Research Branch	[h] [i]				
Manitoba Wildlife Branch	II	II	5280/6480	6	4
Saskatchewan Wildlife Research Division	I	II	5184/7968 [j]	10	6
Alberta Fish & Game Division	I	II	5320/8320	11	6
B.C. Fish & Game Branch	I	III	4884/7980	13	8

(a) The class or grade beyond which advancement is limited by the low number of positions available, or demands for special ability or educational requirements.

(b) Based on uninterrupted progress through every salary step in every class, except in cases of overlapping salary ranges between classes.

(c) The position of Fish and Wildlife Director is at present the only staff position.

(d) For a person with a Bachelor's Degree to qualify he must have additional experience or partial qualifications for a Master's Degree.

(e) New Brunswick has only one grade of Wildlife Biologist.

(f) Seven biologist (non-research) positions are located in the Research Branch.

(g) Personnel have dual wildlife and fisheries responsibility.

(h) A person with a Bachelor's Degree could be hired at the Class I level but there are no staff positions in this class.

(i) Manitoba has no positions at the Class I level.

(j) Plus long-service increment of $240-$380 after 8 years service.

Table 1 cont'd.

B. With Master's Degree

Agency	Class Level		Salary Range (a)	Years to Achieve Limit(b)	No. of Positions in Classes Involved
	Start (c)	Limit			
Canadian Wildlife Service	I	III	6060/9000	11	38
Newfoundland Resources Branch	II	II	6000/7000	10?	1
P.E.I. Fish & Wildlife Division					(d)
New Brunswick Fish & Wildlife Branch	I	I	6636/8076	5	2
Quebec Wildlife Service	III	IV	5500/7000	6	9 (e)
Ontario (a) Fish & Wildlife Branch	II	III	6300/9000	8	32 (f)
(b) Research Branch	II	III	6000/9500	10 (g)	15
Manitoba Wildlife Branch	II	III	5280/7680	10	8
Saskatchewan Wildlife Research Division	I (h)	II	6070/7968 (j)	7	6
Alberta Fish & Game Division	II (i)	II	6540/8280	6	4
B.C. Fish & Game Branch	II	III	5484/7980	10	7

(a) The class or grade beyond which advancement is limited by the low number of positions available or demands for special ability or educational requirements.

(b) Based on uninterrupted progress through every salary step in every class, except in cases of overlapping salary ranges between classes.

(c) Persons with newly acquired Master's Degrees start at the top of Class I.

(d) The position of Fish and Wildlife Director is at present the only staff position.

(e) Six biologist (non-research) positions are located in the Research Branch.

(f) This number is believed to include fisheries and possibly forestry personnel.

(g) The period would likely be less as a person with a Master's Degree would undoubtedly be hired at a salary part way up Class II.

(h) Range 2.

(i) Alberta gives no starting point for a person with a Master's Degree but it is assumed that such a person would start close to the lower end of the Class II range.

(j) Plus long-service increment of $240-$360 after 8 years service.

procedures can be so flexible that variations in these figures from agency to agency may well be meaningless and that there is therefore no point in trying to compare them.

The comparison of the advancement and salary status of the Canadian Wildlife Service in relation to that of other agencies has been divided into three categories:

1. Provincial wildlife agencies
2. Non-government agencies.
3. U.S. Fish and Wildlife Service.

Data for persons having either a Bachelor's or a Master's degree and employed by the C.W.S. or a provincial wildlife agency are presented in Tables 1A and 1B. Since only three agencies, C.W.S., Quebec and Ontario (Research Branch) have specifications for hiring Ph.D.'s and since salaries for such qualifications are the same as for a Master's degree, this category was not considered separately. Starting salary in the C.W.S. for a biologist with a Bachelor's degree is the second lowest among the ten agencies listed. Maximum salary in the C.W.S., however, exceeds (by from $780 to $2520) that of all other agencies except Ontario which pays exactly the same salary. It is interesting to note that the two highest paying organizations, C.W.S. and Ontario, have 60 percent of the positions open to people with Bachelor's degrees. For a person with a Master's degree the C.W.S. offers the fifth highest starting salary and the second highest (by from $780 to $2000) maximum salary, exceeded only by Ontario (Research Branch). In comparing maximum salaries at the Bachelor's and Master's levels one finds only three agencies, Newfoundland, Ontario (Research Branch) and Manitoba where possession of a Master's degree will qualify a person for a higher maximum salary than he could achieve with a Bachelor's degree. In Newfoundland this difference applies specifically to a biologist hired for A.R.D.A. work.

Turning to non-government agencies (Tables 2A, B, C) we find that at the Bachelor's level C.W.S. also pays the lowest starting salary of five agencies and at the maximum level it is the second lowest. However, maximum salaries in the four top agencies vary by only $300. No opportunities are available at the Bachelor's level for permanent teaching positions at major universities or in the resource management program at the Central Saskatchewan Technical School. At the Master's level C.W.S. ranks fourth among seven organizations in level of starting salary and fifth for maximum salary. We are virtually on a par with the Crown Corporations at the maximum salary level and slightly over $300 lower

Table 2. Comparison of Advancement Opportunities According to Educational Qualifications - Canadian Wildlife Service, Crown Corporations, Educational Institutions and a Private Organization

A. With Bachelor's Degree

Agency	Class or Grade Level		Salary Range	Years to Achieve Limit[b]
	Start	Limit[a]		
Canadian Wildlife Service	I	III	4680-9000	13 1/2
National Research Council	I	II[c]	5400-9100	10 1/2
Fisheries Research Board	I	II[d]	5400-9100	10 1/2
University Teaching (Example - U. of Saskatchewan)	minimum of M.Sc. required			
Central Saskatchewan Technical Institute (Resources management)		M. Sc. required		
Collegiate (High School) Teaching (Example - Saskatoon)	IV[e]	IV	5450-9300	12
Ducks Unlimited (Canada)	I	III	4800-8760	14

[a] Class or grade beyond which advancement is limited by educational requirements, demands for special ability or reduced number of positions available.

[b] Based on uninterrupted progress through all salary steps in every class except where there is an overlap in salary ranges.

[c] A person with exceptional ability can, with a bachelor's degree, advance to an Associate Research Officer position and a top salary of $12,000.

[d] No mention is made of a person with a B.Sc. obtaining this level but the statement of qualifications infers that such is possible.

[e] Bachelor's Degree plus a teaching certificate (one year) are required to qualify for this class.

Table 2 cont'd.

B. With Master's Degree

Agency	Class or Grade level		Salary Range	Years to Achieve Limit[b]
	Start	Limit[a]		
Canadian Wildlife Service	I[c]	III	6060-9000	11
National Research Council	I[c]	II[d]	6600-9100	9
Fisheries Research Board	I[e]	II	6600-9100	9
University teaching (Example - U. of Saskatchewan)	Lecturer	Lecturer	6000-8000	7[f]
Central Saskatchewan Technical Institute (Resources Management)	One grade only		7392-8316 7692-9336	4 6
Collegiate (High School) teaching (Example - Saskatoon)	V[h]	V	5840-9800	12
Ducks Unlimited (Canada)	II	III	5940-8760	10

(a) Class or grade beyond which advancement is limited by educational requirements, demands for special ability or reduced number of positions available.

(b) Based on uninterrupted progress through all salary steps in every class except where there is an overlap in salary ranges.

(c) With a Master's Degree a person starts at the top of the class.

(d) A person with exceptional ability can, with a Master's Degree, advance to an Associate Research Officer position and a top salary of $12,000.

(e) No data available for a Master's Degree but the situation is assumed to be comparable to N. R. C.

(f) Estimated.

(g) Lower scale is without a High School teaching certificate; higher scale is with said certificate.

(h) An honour degree plus a collegiate certificate is required. If the person has a Master's degree plus a collegiate certificate he is entitled to a $500 bonus, bringing his salary scale to $5950-$10300.

Table 2 cont'd.

C. With Ph.D. Degree

Agency	Class or Grade Level		Salary Range	Years to Achieve Limit[b]
	Start	Limit[a]		
Canadian Wildlife Service	IIA	III	7320-9000	6
National Research Council	II[c]	III[d]	8200-12000	10
Fisheries Research Board	II[e]	III	8200-12000	10
University Teaching (Example - U. of Saskatchewan)	Assistant Professor	Associate Professor	7500-12800	12[f]
Central Saskatchewan Technical Institute (Resources management)	(g)			
Collegiate (High School) teaching (Example - Saskatoon)	(g)			
Ducks Unlimited (Canada)	(g)			

[a] Class or grade beyond which advancement is limited by educational requirements, demands for special ability or reduced number of positions available.

[b] Based on uninterrupted progress through all salary steps in every class except where there is an overlap in salary ranges.

[c] Person with a new Ph.D. starts part-way up the scale in Class II.

[d] A person with exceptional ability can, without accepting administrative responsibilities, advance to the rank of Principal Research Officer (Class V) and a top salary of $16,900.

[e] No specific data on starting salary for new Ph.D. or advancement beyond the Class III level but assumed to be comparable to N.R.C.

[f] Estimated on the basis of average rate of advancement by staff.

[g] No special provision for hiring Ph.D.'s - presumably would be hired part-way up the salary scale for a person with a Master's degree.

than the best salary offered by the Central Saskatchewan Technical Institute. It is in relation to salaries paid for high school teaching, however, that our Service compares most unfavorably. In Saskatoon, where salaries compare favorably with those offered by city high schools elsewhere in the country, a person with a Master's degree who takes an additional year (or two summer schools) of education courses can qualify for salaries ranging up to $1300 higher than those paid by the C.W.S. Salaries paid by Ducks Unlimited, the only private organization involved in wildlife work for which I have data, pay salaries at both the Bachelor's and Master's levels which are slightly lower than C.W.S.

The non-government agencies which hire predominantly biologists at the Ph.D. level are the National Research Council, Fisheries Research Board and the universities and it is here that there is the most marked differential in salary levels. Starting salaries paid for a new Ph.D. with no experience are $180 higher at the University of Saskatchewan and $880 higher at the Crown Corporations than they are with the C.W.S. but maximum salaries are $3800 and $3000 higher respectively! It should be remembered also that the maximum salaries referred to here are ones readily attainable by those of average ability and that a person with more ability can go even further. In the National Research Council, for example, a person can, if he has the ability, attain the rank of Principal Research Officer at a maximum salary of $16500 without accepting any administrative responsibilities. This situation presents two problems for our organization first, there is the question of experienced personnel presently on staff (17 percent of the staff of the Canadian Wildlife Service below the Biologist 4 level hold Ph.D. degrees and an additional 38 percent are either working toward this degree or are contemplating doing so) moving to higher paying positions at universities and, second, there is the even greater difficulty of trying to attract experienced men of high calibre from these same institutions to meet our growing requirements for researchers in a wide range of specialized fields.

The comparison of salary scales and advancement opportunities in the Canadian Wildlife Service and the U.S. Fish and Wildlife Service may be subject to question since the level of national economy and standard of living of another country are involved. The U.S.F.W.S. is, however, the closest counterpart of the C.W.S. in terms of scope of function and level of responsibility and for that reason it is perhaps worthwhile to include such data for general information. In the U.S. Fish and Wildlife Service it is possible for a person with ability to advance quite rapidly to the GS-11 level without changing positions and without

changing positions and without having to work his way to the top of each grade (a process which, by the book, would require 18 to 21 years for each grade). Starting salaries in the U.S.F.W.S. at the Bachelor's, Master's and Ph.D. levels are $320, $1160 and $1330 higher, respectively, than are the comparable salaries in the C.W.S. (Table 3). The maximum salary at the GS-11 level is $2309 higher than the top salary for a biologist III in our Service.

In the preceding pages the salaries paid to biologists employed by the C.W.S. have been examined at some length in relation to those paid by other agencies. Before summarising these findings it might be well to look briefly at the position of biologists as a group in relation to other fields of natural science. Data presented in Professional Manpower Bulletin No. PM/6 published by the Department of Labor in July 1964 show that:

(a) Median annual earnings in 1963 in the field of natural science as a whole were $9400 but the median for biologists was only $8700, second lowest of eight categories.

(b) Median annual earnings in the fields of engineering (group median of $9600) and natural science (group median of $9400) for a person with a Bachelor's degree and five years experience were as follows according to type of employment: Government - $7300

Private Industry - $7600.

The levels for a person with a Master's degree and five years experience were: Government - $8600

Private Industry - $8400.

The levels for a person with a Ph.D. degree and five years experience were: Government - $8700

Private Industry - $10500.

On the basis of these data it appears that salaries at the Bachelor's and Master's levels are fairly competitive between government and industry. Industrial salaries are higher by $300 at the Bachelor's level and government salaries are higher by $200 at the Master's level. At the Ph.D. level, however, government salaries fall well below (by $1800) those paid by private industry. It would appear that governments place an annual premium of $100 on the training and experience which accrue from the attainment of a Ph.D. degree.

Table 3. Comparison of Advancement Opportunities According to Educational Qualifications - Canadian Wildlife Service and U.S. Fish and Wildlife Service.

Agency & Educational Qualification	Class Level		Salary Range	Years to Achieve Limit (b)
	Start	Limit (a)		
A. Bachelor's Degree				
Canadian Wildlife Service	I	III	4680/9000	13 1/2
U.S. Fish & Wildlife Service	GS-5	GS-11	5000/11305	(c)
B. Master's Degree				
Canadian Wildlife Service	I (d)	III	6060/9000	11
U.S. Fish & Wildlife Service	GS-9	GS-11	7220/11305	(c)
C. Ph.D. Degree				
Canadian Wildlife Service	IIA	III	7320/9000	6
U.S. Fish & Wildlife	GS-11	GS-11	8550/11305	(c)

(a) The class or grade beyond which advancement is limited by the low number of positions available or demands for special ability or educational requirements.

(b) Based on uninterrupted progress through every salary step in every class, except in cases of overlapping salary ranges between classes.

(c) Calculation of years to limit is meaningless as it is common practice to award within-grade increments at more frequent than prescribed intervals to qualified personnel and to advance such personnel before they reach the top of their grade.

(d) Persons with newly acquired Master's Degrees start at the top of Class I.

Summation

1. Maximum salaries paid to biologists by the Canadian Wildlife Service are appreciably better (by $780 to $2000 at the Masters and Ph.D. levels) than those of any provincial agency except Ontario which pays at an equal rate in the Fish and Wildlife Branch and $500 more (at the Master's and Ph.D. levels) in the Research Branch.

2. Maximum salaries paid by the National Research Council and Fisheries Research Board are comparable to those paid by the C.W.S. at the Bachelor's and Master's levels but are $3000 higher at the Ph.D. level.

3. Maximum university (Saskatchewan) salaries at the Master's level are $1000 less than those paid by C.W.S. but at the Ph.D. level exceed ours by $3800.

4. The Central Saskatchewan Technical Institute pays a maximum salary for a Master's degree (or Ph.D.) plus a high school teacher's certificate which is $336 greater than for comparable qualifications in the C.W.S.

5. Maximum salaries for high school teachers (Saskatoon) range from $300 greater at the Bachelor's level to $1300 greater at the Master's and Ph.D. levels than do those of C.W.S..

6. Ducks Unlimited, the only private wildlife organization contacted, pays salaries which are slightly lower than those of C.W.S. at the Bachelor's and Master's levels and apparently follows our lead in salary revisions.

7. Maximum C.W.S. salaries are appreciably lower(by $2300) at all educational levels than those paid by the U.S. Fish and Wildlife Service.

8. Biologists as a group have, nationally, the second lowest median salary in the natural science category. Biologists employed by governments receive salaries at the Bachelor's and Master's levels which are approximately equivalent to those paid by industry but at the Ph.D. level there is an $1800 differential in favor of industry.

Conclusions

1. Biologists with a bachelor's or Master's degree can do as well or better, salary-wise, in the Canadian Wildlife Service than they can in any other Canadian organization, governmental or otherwise, with the exception of city high schools and the Research Branch of the Ontario Department of Lands and Forests.

2. Universities, Crown Corporations and even city high schools offer appreciably more remuneration to the biologist with a Ph.D. than does the C.W.S..

3. The salary differential at the Ph.D. level can be resolved in one of tw ways. First, and most logical, is the inclusion of C.W.S. biologists in the new Scientist classification system which provides for advancement to the $12,000 level without the necessity of carrying requests for approval of reclasaification beyond the departmental level. Second, there is the possibility of pressing f r full implementation of the Biologist (Research) sub-series of our ex sting classification system, the framework of whichhas existed in Civil Service Commission specifications since November, 1960.

Recommendations

Further action should await clarification of (a) our status with regard to the new classification system and (b) Departmental policy (in the event we are included in the new system) regard ng reclassification of personnel to the Scientist 2 level.

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Wildlife Biologist

Saskatoon, Sask.
March 29, 1965.

Table A - 1 Government of Canada Department - Northern Affairs & National Resources Branch - Parks, Canadian Wildlife Service
Biologist & Biologist (Supervisory) Sub-series

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range[b]	No. of (a) Increments
I	Biologist I	Officers work under supervision. Problems are assigned and in most cases the plan of work is outlined by a senior officer. They are seldom expected to plan cooperative projects. May be expected to train and supervise non-professional assistants.	B. Sc.	1	1			$4,680 to $6,060	5 semi-annual & 1 annual
II	Biologist II	Supervision is general in nature. The major responsibility for the way in which projects are conducted is assumed by officers at this level. May be expected to supervise professional and to train and supervise non-professional staff.	B.Sc.& 4 yrs. experience or M.Sc.& 2 yrs. experience	8	3	5		$6,180 to $7,320	4 annual
IIA	Biologist IIA		Ph.D. - no experience	4			4	$7,320 to $7,680	1 annual
III	Biologist III	Work is performed under general direction and little or no technical guidance is provided. Officers assume the major responsibility for the technical advice provided to industry. May train and supervise professional and non-professional staff and may delegate responsibility for preliminary interpretation of data & initial writing of reports.	B.Sc. & 7 yrs. experience or M.Sc. & 5 yrs. experience or Ph.D. & 3 yrs. experience	(c) 16	1	13	1	$7,860 to $9,000	4 annual
IV	Biologist IV	Work involves supervision below the first major administrative level. May be head an organizational unit comprising one main & one or more field or branch establishments or head of a laboratory, either establishment of which has a staff of at least 3 Biologist 2's & 1 Biologist 3.	B.Sc. & 10 yrs. experience or M.Sc. & 8 yrs. experience or Ph.D. & 6 yrs. experience Recognition as a specialist in his field	(d) 5	1	3	1	$9,140 to $10,700	4 annual
V	Biologist V	Regional superintendents and staff specialists.	B.Sc.& 14 yrs.experience or M.Sc.& 12 yrs.experience or Ph.D.& 10 yrs.experience	6	2		4	$10,900 to $12,500	3 annual
VI	Chief of Canadian Wildlife Service	Responsible for direction of the entire Service.	Education as listed for preceding categories + extensive supervisory & administrative experience	1			1	$14,000 to $15,100	2 annual

(a) Above base salary
(b) (1) At the Biologist II level extra duty pay for non-research supervisory duties adds $300 to the annual salary.
(2) At the Biologist III level extra duty pay for research supervisory duties adds $300 to the annual salary.
(c) Including one receiving supervisory pay. (d) Plus one Veterinary 4.

Table A - 2 Govern ent of anada Department - Northern Affairs & National Resources Branch - Parks, Canadia Wild ife Service
Biologist (Research) Sub-series

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions (a)	Educational Level of Personnel			Salary (b)	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of Increments
I	Biologist I (Research)	Officers work under supervision. Problems are assigned and in most cases the plan of work is outlined by a senior officer. They are seldom expected to plan cooperative projects. May be expected to train and supervise non-professional staff.	B.Sc.						
II	Biologist II (Research)	Officers work under general supervision. Problems are assigned but not in terms of specific experiments. Officer must develop theoretical approaches to problems and plan and execute the work. May be required to supervise and train professional and non-professional workers.	B.Sc.& 4 yrs. experience or M.Sc.& 2 yrs. experience or Ph.D.						
III	Biologist III (Research)	Work is performed under general direction. The major responsibility for the way in which projects are carried out is assumed by officers at this level. May train and supervise professional and non-professional staff and may delegate responsibility for preliminary interpretation of data and initial writing of reports.	B.Sc.& 7 yrs.experience or M.Sc.& 5 yrs.experience or Ph.D.& 3 yrs.experience Has established a reputation as a research worker in a particular fie d.						
IV	Biologist IV (Research)	O icers receive little or no technical direction. Officers are responsible for a comprehensive programme of research in a field of work where it is difficult to prepare detailed work plans because pr noiples and procedures are not well established. May assign projects and delegate responsibility for interpreting data and writing reports among assistants.	B.Sc.& 10 yrs.experience or M.Sc.& 8 yrs.experience or Ph.D.& 6 yrs.experience. Recognized by workers in their own or allied fields ac specialists and authorities.						
V	Biologist V (Research)	Officers receive no technical supervision in their field of specialization. Conduct e highly specialized and involved research programme. Supervisory activities are as for Biologist 4.	B.Sc.& 14 yrs.experience or M.Sc.& 12 yrs.experience or Ph.D.& 10 yrs.experience Internationally recognized as a specialist and authority in his own field.						

(a) Entire C.W.S. Staff ie listed under the Biologist sub-series as information on research appointments is not at hand.

(b) Salaries are the same as for the Biologist sub-series.

Table B. Province - Newfoundland Department - Mines, Agriculture and Resources Branch - Resources

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Director I (Wildlife Biologist)	Field Biologists to gather and process data	B.Sc.	3	3			$5,700 to $6,100	4 annual
II	Director II (Director of Wildlife)	Supervise A.R.D.A. land inventory program for wildlife (moose)	B.Sc.	(b) 1				$6,200 to $6,500 (a)	4 annual
III									
IV	Director IV (Director of wildlife management)	In charge of the wildlife management and research program for Newfoundland.	B.Sc.	1		1		$7,700 to $8,400	7 annual

(a) Above base salary
(b) Position created in 1965 - not filled as of February 1965.
(c) Salaries relative to A.R.D.A. are flexible, for a person with a B.Sc. - $5,000 - $6,000, M.Sc. $6,000 - $7,000, Ph.D. - $8,000+.

Table C rovince - rince Edward Island Department - Industry and Natural Re ources Division - Fish and Wildlife

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	(b) Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
	Fish and Wildlife Director	Responsible for all technical admini tration and public relations work in planning and directing the province's fish and wildlife progrms.	Graduation from a University with major courses in biology, supplemented by graduate work to the level of a Master's Degree in Wildlife Management, and considerable supervisory experience in wildlife management; or any equivalent combination of training and experience.	1		1		$6,069 to $7,377	4 annual, w en merited,

(a) Above base salary.

(b) It is expected that a wildlife biologi t will be added to the staff in 1965.

Table D Province - New Brunswick Department - Lands and Mines Branch - Fish and Wildlife

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Wildlife Biologist	Responsible for planning and conducting wildlife surveys and investigations. Work is evaluated by senior officials through review of reports and effectiveness of services rendered and the programs developed.	Graduation from a University with major course work in biology supplemented by graduate work to the level of an M.Sc. in Wildlife and considerable experience in wildlife management or any equivalent combination of training and experience	2	(b) 1	1		$6,636 to $8,076	(c) 4 annual

(a) Above base salary.

(b) Working toward M.Sc.

(c) Increases are at a level of 5% per year.
Made on the recommendation of the Branch Director.

Table E. Province - Quebec Department - Tourism, Fish and Game Branch - Wildlife Service

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			(b) Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increment
I		Works under direct supervision on wildlife project. May be required to supervise technicians.	B.Sc.	6	6			$4,200 to $5,000	4 semi-annual
II		Supervision is more remote. The incumbent may act as a team leader supervising a biologist I and two technicians.	B.Sc. + 2 yrs. experience	3	2	1		$4,800 to $5,800	4 annual
III		Incumbents are classed as project leaders or junior research biologists.	M.Sc. or B.Sc. & 4 yrs. experience	2		2		$5,300 to $6,800	4 annual
IV	Senior Operation Biologist	Under the supervision of district chief.	Ph.D. or M.Sc. & 2 yrs. experience or B.Sc. & 6 yrs. experience	7	3	2	2	$6,000 to $7,000	4 annual
	Senior Research Biologist	Under supervision of Division director.							
V	District Chiefs	Senior biologist in charge of special project	Ph.D. or M.Sc. & 4 yrs. experience or B.Sc. & 8 yrs. experience	15	4	9		$6,800 to $8,000	4 annual
	Division Director	Junior assistant director of Wildlife Service						$8,400 to $9,600	4 annual
VI	Assistant Director(senior)	Administration	?	1			1	$9,300 to $11,800	?
VII	Director	Responsible for direction of entire provincial wildlife management and research program.	?	1			1	$10,300 to $11,800	?

(a) Above base salary.

(b) Salary reclassification is currently under negotiation.

Table F-1. Province - Ontario Department - Lands and Foresta Branch - Fish and Wildlife[b]

Class or Grade	Title of Position	Definition of Class[c] (Kind or Level of Work)	Minimum Qualifications	Number[d] of Positions[e]	Educational Level of Personnel (f)			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Biologist I	Undertake routine professional assignments on field or laboratory projects, usually under the supervision of an experienced biologist.	Graduation in biology, zoology or closely related honour course	14 (1)				$5,250 to $6,300	Four semi-annual
II	Biologist II	Professional biological work performed under general direction with considerable latitude for independent decisions. Involves preparation of detailed plans for wildlife studies and technical direction with respect to the implementation of same.	B.Sc. & 2 yrs. acceptable experience OR M.Sc. & 1 yr. experience	18(4)				$6,300 to $7,500	Four annual
III	Biologist III	Professional and supervisory work pertaining to wildlife and fisheries management programs in a district or comparable duties in head office. Involves supervision of junior biologists, Conservation Officers, etc.	B.Sc. & 3 yrs. of progressively responsible experience OR M.Sc. & 2 yrs. experience	14 (2)				$7,200 to $9,000	Five annual
IV	Senior Biologist	Responsibility for the administration and professional direction of a major wildlife or fisheries unit - ordinarily the position involves supervision of staff in Head Office.	B.Sc. & many years experience. Administrative and supervisory ability, initiative, good judgment	4 (1)				$8,600 to $10,500	Five annual

(a) Above base salary.

(b) A number of biologists positions are located in the Research Branch.

(c) Personnel have dual responsibility for wildlife and fisheries management

(d) Figures in parentheses indicate the number of positions out of the total which are located in the Research Branch.

(e) Staff also includes Section Supervisor 1-1
Section Supervisor 2-1

(f) Data not provided.

Table F-2. Province - Ontario Department - lands and Forests Branch - Research

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions (c) (d)	Educational Level of Personnel (b)			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Research Scientist I	Under immediate supervision to participate in planning and execution of projects. Work involves making analyses, compilation of data and assisting in writing reports. Supervision of non-professional staff may be required.	Graduation in forestry or honour degree in biology or other suitable field of science.	0				$5,250 to $6,300	Four semi-annual
II	Research Scientist II	Under supervision of a senior scientist plans and conducts assigned research studies, analyses and interprets results and prepares reports and scientific papers. May be required to supervise and train non-professional staff.	M.Sc. Demonstrated ability to carry out research	5		5		$6,000 to $7,200	Four annual
III	Research Scientist III	Responsible for a research program in a special field of inquiry. Supervision is general and the scientist is responsible for determining and developing methods and procedures. Scientists train and supervise junior scientists and non-professional staff.	M.Sc. & 3 yrs. acceptable experience OR Ph.D. supported by significant research	10		8	2	$7,600 to $9,500	Four annual
IV	Research Scientist IV	Conducts and supervises a comprehensive research program involving a number of individual projects or independent conduct of a highly specialized research program. Receives no technical direction. Assigns projects to junior scientists.	M.Sc. & 7 yrs. experience OR Ph.D. & 4 yrs. experience	6		3	3	$10,000 to $12,000	Four annual
V	Research Scientist V	Class definition is essentially as for Research Scientist IV. Advancement to this grade is limited to scientists who have achieved international recognition as authorities in their own field.	M.Sc. & 10 yrs. experience OR Ph.D. & 7 yrs. experience	1		1		$11,000 to $13,000	Four annual

(a) Above base salary

(b) Figures inferred on the basis of data provided

(c) Figures listed include fisheries research personnel

(d) Staff also includes: Research Supervisor 1-2
Research Supervisor 2-2.

Table G. Province - Manitoba Department - Mines and Natural Resources Branch - Wildlife Branch

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Game Biologist I	A trainee position. Incumbents work under close supervision on wildlife research and management problems	B.Sc. No experience	0				$4,800 to $6,000	Five annual
II	Game Biologist II	Incumbents work under supervision on wildlife research and management problems. They are expected to exercise considerable independence in planning and carrying out work programs. They may supervise biological assistants in the collection and processing of data.	B.Sc. AND (a) M.Sc. (or partial completion thereof) OR (b) Several years field experience	4	3			$5,280 to $6,480	Five annual
III	Game Biologist III	Professional work involving wildlife research and management programs on an independent level with only cursory supervision. Usually involves supervision of lower-graded biologists, conservation officers, clerical workers, etc.	B.Sc. AND (a) M.Sc. (or partial completion thereof) AND (b) Several years field experience	4	1	3		$6,000 to $7,680	Five annual
IV	Game Biologist IV	Professional supervisory work involving direction of broad phases of wildlife research and management programs	M.Sc. plus several years experience including some at a responsible supervisory and administrative level.	0				$6,960 to $8,760	Five annual
V	Chief, Game and Fur Management	Responsible for the direction of the entire wildlife research and management program in the province.	M.Sc. plus extensive experience in the administration and management of wildlife resources.	1		1		$7,680 to $9,460	Five annual

(a) Above base salary.

Table H. Province - Saskatchewan Department - Natural Resources Branch - Wildlife Research Division

Class or Grade	Title of Position	Definition of Class (Kind or level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Wildlife Ecologist I	Professional scientific work in performing wildlife research studies under the technical supervision of Area Supervisors	Range I - B.Sc.	3	3			$5,184 to $6,312	Five annual
			Range II - M.Sc.					$6,070 to $7,680	Five annual
II	Wildlife Ecologist II	Responsible professional work in wildlife research including supervision of Ecologist I and biological assistants.	B.Sc. plus 4 yrs. in wildlife management OR M.Sc. and several years related experience	3	2	1		$6,564 to $7,968	Five annual
III	Wildlife Ecologist III (Chief Wildlife Ecologist)	Professional supervisory work in directing a technical wildlife research program.	M.Sc. plus extensive experience in wildlife research, including supervisory experience	1(b)				$7,392 to $8,976	Five annual
IV	Assistant Director.	Supervises the operation of the Wildlife Branch	M.Sc. in wildlife management plus extensive experience in administration and management of wildlife resources	1		1		$7,992 to $9,708	Five Annual
V	Director	(c)	(c)	1				(c)	(c)

(a) Above base salary

(b) Position vacant as of March, 1965.

(c) Data not provided.

Table I Province - lberta Department - Lands and Forests Branch - Fish and Wildli e Division

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel (BA) B.Sc.	(MA) M.Sc.	Ph.D.	Salary (b) Range	No. of (a) Increments
I	Wildlife Biologist I	Professional work in performing wildlife management and research studies. Incumbents work under the supervision of a Fish and Wildlife Biologist II.	B.Sc. or equivalent combination of experience and education.	2	2			$6,320 to $7,140	7 annual
II	Wildlife Biologist II	Advanced professional work involving considerable independence in planning and conducting wildlife management and research procedures. May involve supervision of assistantand field staff.	B.Sc. plus considerable experience in wildlife study including some in a supervisory or administrative capacity.	4	1 B.A. 1 B.Sc.	2		$6,540 to $8,320	5 annual
III A	Wildlife Biologist III (Chief Wildlife Biologist)	Supervision of wildlife resources management and research programs throughout the province. Work is subject to review by the Fish and Wildlife Director.	B.Sc. plus considerable experience in administration and management of Wildlife resources.	1		1		$7,140 to $9,000	5 annual
III B	Fish and Wildlife Administrator	Supervision of enforcement of regulatory controls throughout province and administration of operational and service procedures. Involves supervision of conservation offices and related office staff. Work is subject to review by Director.	University graduation in law plus considerable experience in law enforcement and resources administration.	1				$7,140 to $9,000.	5 annual
IV	Fish and Wildlife Director	Plans and directs operations of the Fish and Wildlife Division. Supervises all stn f. Work is subject to review by the deputy minister of Lands and Forests.	Univ. graduation in agriculture or Biology plus extensive experience in Fish and Wildlife administration and management.	1	1			$9,000 to $11,400	(c)

(a) Above base salary.
(b) "Long service" increment of $20 to $30 per month (depending on one's classi ication) is granted after 8 years service.
(c) No. of increments not known.

Table I. Province - British Columbia Department - Recreation and Conservation Branch - Fish and Game

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	(b) Range	No. of (a) Increments
I	Game Management Biologist I	To conduct under direction, technical studies relative to the management of wildlife.	University graduation in zoology and preferably wildlife ecology.	(c) 1	1			$4,824 to $5,940	5 annual
II	Game Management Biologist II	To conduct under direction, technical studies relative to the management of wildlife.	University graduation in zoology and preferably wildlife ecology plus post-graduate training.	(d) 1		1		$5,484 to $6,720	5 annual
III	Game Management Biologist III	To undertake and supervise wildlife investigations necessary for management of wildlife.	University graduation in zoology and preferably wildlife ecology plus post-graduate training toward a Master's degree	(e) 6	(g) 1	5		$6,456 to $7,960	5 annual
IV A.	Assistant Chief Management Biologist	(h)	(h)	(f) 3	(g) 2		1	$6,960 to $8,700	5 annual
B.	Research Biologists								
V	Chief Game Management Biologist	(h)	(h)	(h)				$7,960 to $9,420	4 annual

(a) Above base salary.
(b) A pay increase is scheduled for 1965-66.
(c) Incumbent in process of promotion to Grade II.
(d) Incumbent in process of promotion to Grade III.
(e) One incumbent in process of promotion to Grade IV.
(f) One incumbent in process of promotion to Grade V.
(g) Incumbents have post graduate training.
(h) Data has not been obtained.

Table K. National Research Council

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	(b) Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Junior Research Officer	To undertake research on assigned problems under the supervision of a senior officer.	B.Sc.					$5,400 to $6,600	5 semi-annual
II	Assistant Research Officer	To assist in research of major importance and difficulty and, when required, to undertake assigned problems without close supervision.	Ph.D + 2 years' research experience					$7,000 to $9,100	7 annual
III	Associate Research Officer	To undertake and be responsible for research work on problems of considerable importance and difficulty. To supervise the work of subordinate research workers.	Ph.D. + 6-8 years of research experience					$9,500 to $12,000	6 annual
IV	Senior Research Officer	To be responsible for major research projects.	Ph.D. + considerable experience and is a recognized authority in his field.					$12,500 to $15,000	5 annual
V	Principal Research Officer	To direct a broad research program.	Ph.D. and is recognized internationally as an authority in his field.					$15,000 to $18,000	3 annual

(a) Above base salary.

(b) Staff data are not presented because many scientific disciplines, other than biologists, are involved.

Table L. Fisheries Research Board of Canada

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	(b) Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Assistant Scientist	Assists in carrying out projects according to plan, including the supervision of the work of others.	University graduation, usually with honors, with experience in the field related to the duties to be performed.					$5,400 to $6,600	five semi-annual
II	Associate Scientist	Assists in planning and carrying out research projects of major significance. Plans and directs subordinate projects. Supervises the work of technical and professional assistants.	Ph.D. or its equivalent in education, experience and demonstrated research ability.					$7,200 to $9,100	seven annual
III	Senior Scientist	Responsible for planning and directing research projects.	Ph.D. or its equivalent. Demonstrated research and organizational ability with at least 5 years experience in related fields					$9,100 to $12,000	seven annual

(a) Above base salary

(b) Staff data are not presented because many scientific disciplines, other than biologists, are involved.

Table X - Salary Scales for some Major Canadian Universities - 1964 - 65.

Category (a)	Montreal University	Queen's University	McGill University	University of Toronto	Unive sity of Manitoba	University of Saskatchewan	University of Alberta	University of British Columbia
Lecturer	$6,000/$9,500 ($200 & $300 increment)	$6,000/$7,500 (b,c)	$6,250/$7,500 (b,c)	$6,000/$7,500 (b,c)	Not stated /$7,499 (c)	$6,000/$8,000 ($300 increment)	No minimum or maximum (c)	$5,500/$7,000 (b,c)
Assistant Professor	$7,500/$10,500 ($200 & $300 increment)	$7,500/$9,500 (b,c)	$7,800/10,000 (b,c)	$7,500/$9,500 (b,c)	$7,500/$9,499 (c)	$7,500/$9,800 ($400 increment)	$7,500/$9,600 ($400 increment)	$7,000/$9,000 (b,c)
Associate Professor	$10,000/$13,500 ($300 increment)	$9,500/$13,000 (b,c)	$10,000/$13,000 (b,c)	$9,500/$13,000 (b,c)	$9,500/$12,999 (c)	$10,000/$12,800 ($400 increment)	$10,000/ $12,600 ($400 increment)	$9,000/$12,000 (b,c)

(a) 1. Kind or level of work - Because of the wide variations in job specifications for individual positions no attempt has been made to spell out the differences in level of responsibility.

2. Minimum qualifications - Lecturer - must have a Master's degree and is commonly someone working toward a Ph.D. degree. Assistant and Associate Professors - Ph.D. required by most Universities.

3. Rate of Advancement - variable - Average length of time required to reach the top of the Assistant Professor level appears to be in the order of five years with another six to seven years required to attain the top of the Associate Professor level.

(b) No stated maximum - upper value given is minimum for next highest class.

(c) No stated increment.

Table N. Central Saskatchewan Technical Institute.

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Technology Instructor	Develop resources management course as required. 12-15 hours per week teaching load. Student counselling. Individual instructors specialize in wildlife, fisheries, forestry and parks management.	B.Sc. in Wildlife plus M.Sc. and 5 years experience plus Sask. High School teacher's certificate (optional).	(d) 4		2	1	(b) $7,392 to $8,316	3 annual
								$7,692(c) to $9,336	5 annual

(a) Above base salary

(b) Without a Saskatchewan High School Teacher's Certificate.

(c) With a Saskatchewan High School Teacher's Certificate.

(d) One position vacant as of March 1965.

Teble 0. Saskatoon Collegiate Institutes

Class or (c) Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions (d)	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	(b) Range	No. of (a) Increments
IV		Apparently no fixed differences in teaching requirements between classes.	Four years training - B.Sc. & 1 year to get teaching certificate.					$5,450 to $9,300	11 annual
V			Five years training- one year for teaching certificate. plus Honors Degree					$5,840 to $9,800	11 annual
VI (Class V with bonus)			B.Ed. degree + Honors Degree or Master's degree + collegiate institute certificate					$6,340 to $10,300	11 annual

(a) Above base salary.

(b) Salary scale effective July 1, 1965.

(c) Classes I, II & III are for persons having one, two and three years education training respectively.

(d) No staff data are presented as many fields of knowledge, other than biologists are involved.

Table P. Ducks Unlimited

Class or Grade	Title of Position	Definition of Class (Kind or Level of Work)	Minimum Qualifications	Number of Positions	Educational Level of Personnel			Salary	
					B.Sc.	M.Sc.	Ph.D.	Range	No. of (a) Increments
I	Biologist I	Under supervision to carry out research projects relating to waterfowl management.	B.Sc.	0				$4,800 to $5,940	4 annual
II	Biologist II	Under supervision to carry out research projects relating to waterfowl management.	B.Sc. plus some experience	(b) 1				$5,940 to $7,140	4 annual
III	Biologist III	Responsible for supervising the biological programme in a province. Directs the activities of Biologists I & II and technicians.	B.Sc. plus several years experience	2	(c) 1	1		$7,320 to $8,760	4 annual
IV	Chief Biologist	Responsible for directing the entire biological programme of Ducks Unlimited.	University Graduate plus extensive experience	1		1		(d)	(d)

(a) Above base salary.

(b) Position vacant as of March 1965.

(c) Working on M.Sc.

(d) Data not obtained.

Table Q. U.S. Fish & Wildlife Service

Class or Grade	Title of Position (c)	Definition of Class (Kind or Level of Work)	Minimum Qualifications (b)	Salary Range	Salary No. of Increments
I	Wildlife Biologist GS - 5	Positions at this level are characterized by intensive training and the performance of supporting work in research requiring professional training but little or no experience.	4 year course of study leading to a Bachelor's or higher degree with major study in zoology, wildlife biology or botany.	$5,000 to $5,425	
II	Wildlife Biologist GS - 7	Positions at this level are characterized by advanced training in research techniques and methods and by the performance of work of limited scope and complexity which is a minor phase of broader assignments of other employees.	B.Sc. as above plus 1 year's professional experience or 1 year of graduate study.	$6,000 to $7,630	
III	Wildlife Biologist GS - 9	Work is performed under the technical and administrative supervision of a researcher of higher grade. Immediate objectives are indicated by the supervisor as well as the nature of results to be expected.	B.Sc. + 2 yrs. professional experience in wildlife biology or B.Sc. + 1 year of graduate study plus 1 year of professional experience.	$7,220 to $9,425	
IV	Wildlife Biologist GS - 11	Work is performed under general supervision. Incumbent performs difficult and responsible work assignments of which he must personally plan the details. Projects are expected to result in a publishable addition to scientific knowledge.	B.Sc. + 3 yrs. professional experience showing ability to work independently or Ph.D. or B.Sc. + combination of 3 yrs. experience and graduate training.	$8,600 to $11,000.	
V	Wildlife Biologist GS - 12	Assignments are given in terms of broad general objectives. Incumbents perform difficult and responsible work which involves a substantial amount of initiative and creativity and has the objective of filling in a critical gap of knowledge.	B.Sc. + 3 yrs. professional experience showing that applicant has broad knowledge in his field, can plan and conduct research independently or to conduct very difficult research or B.Sc. + 3 yrs. of combined education and experience meeting the above criteria.	$10,320 to $13,445	
VI	Wildlife Biologist GS - 13	Performance of usually difficult and responsible work requiring extended professional training and experience. Typical assignments may be of sufficient complexity that they must be approached through a series of complete and conceptually related research studies. These may be carried out by the incumbent or by a team of which he is the leader.	At least 5 yrs. of progressive professional experience or combination of experience & post-graduate training which shows that the applicant has the ability to initiate and pursue original scientific research of considerable importance involving extensive knowledge of several aspects of wildlife biology.	$12,075 to $15,855.	

Table Q cont'd. U.S. Fish & Wildlife Service

Class or Grade	Title of (c) Position	Definition of Class (Kind or Level of Work)	Minimum (b) Qualifications	Salary Range	Salary No. of (a) Increments
VII	Wildlife Biologist GS - 14	1. Requirements as for GS - 13 plus a record of productivity and originality to sufficiently establish the incumbent among the ranking authorities in his specialization or 2. Responsibility for the administrative management, scientific leadership or technical coordination of a segment of the agency's research program of sufficient importance that it has warranted the establishment of a separate research organization and laboratory.	At least 3 yrs. of progressive professional experience or 3 yrs. of combined experience and graduate study which shows by accomplishment that the applicant has ability of a very high order in planning, organizing, directing and interpreting very complex projects and has a comprehensive and authoritative knowledge of wildlife biology.	$14,170 to $18,380	9
VIII	Wildlife Biologist GS - 15	Requirements are essentially the same as for GS - 14.	At least 3 yrs. of progressive professional experience or combination of experience and graduate education which shows that the applicant has ability to plan, direct and conduct highly complex technical and administrative programs which are regional, national or international in scope.	$16,460 to $21,390	9

(a) Above base salary - The pattern of granting increments is as follows: Annually for the first three increments in a class, every two years for the next three and every three years beyond that.

(b) For all positions at the GS - 7 and higher grades applicants must have had at least one year of required professional experience at a level of difficulty comparable to the next lower grade in this series.

(c) GS - 5 and GS - 7 are trainee grades in the Wildlife Biologist (General) category. From GS - 9 to GS - 15 positions are categorized as Wildlife Biologist (General), Wildlife Biologist (Management) and Wildlife Biologist (Research.)
Salary scales in these categories are identical but the training and experience requirements differ somewhat. Data provided in this table are for the Wildlife Biologist (Research) category.