

often unreasonable, the specialist should remember that his scheme of nomenclature to be truly successful must answer the purposes of others as well as himself. If the specialist conservatively retains well-known and natural generic groups he may segregate subgenera indefinitely without retarding the progress of exact taxonomy, and, at the same time, without interfering with the less exacting needs of the general zoologist and the amateur. Moreover, further advantage is found in the fact that the percentage of legitimate changes of names that would confront the much-abused amateur would be greatly reduced; for changes of subgeneric names on account of preoccupation and other causes would in most cases concern only the specialist.

I could name at least one other leading mammalogist who heartily concurs in the views quoted. So the issue is not exactly one between the "general biologist" and the systematist, but is rather one between two different types of systematists. In this conflict the "general biologist" should, I think, lend his regard for the interests of the scientific public.

F. B. SUMNER

SCRIPPS INSTITUTION FOR BIOLOGICAL RESEARCH,
LA JOLLA, CALIFORNIA

THE PROBLEM OF THE PRIBILOF ISLANDS

THE U. S. Bureau of Fisheries has issued an elaborate and handsomely illustrated report on Alaskan conditions,¹ the work of Mr. E. Lester Jones, its deputy commissioner, embodying the results of his investigations during the past summer. The major portion of this work lies outside of the writer's field, but that portion which treats of the fur-seal islands suggests a few words of comment from one who has given much time and attention to their problems.

Mr. Jones thus sums up the Pribilof Islands problem:

If moral, intellectual and general conditions are to be improved; if the business of the islands is to be carried on along business lines (and surely the proposition of these islands, including the fur-

¹ Report of Alaska Investigations in 1914; Department of Commerce, Bureau of Fisheries, by E. Lester Jones, Deputy Commissioner of Fisheries, December 31, 1914.

seal and the fox herds, is largely commercial), then the situation must be viewed from an entirely different standpoint than hitherto; for the returns the government is to receive from its investment warrant the expenditure of a sum of money large enough to give the officials of the government and the natives civilized surroundings, and to provide adequate means and necessary facilities to accomplish a proper administration of the affairs of these islands.

This summary follows the discussion of a long series of topics such as immorality and drunkenness among the natives; inadequate and unsanitary housing facilities; unsatisfactory schools; inadequate and ill-adjusted wage schedules; insufficient occupation for the natives; need of additional government agents; better facilities for unloading vessels; stricter landing regulations, etc., the conditions respecting these matters being found to be "deplorable." The keynote of the whole discussion is that the government officials and natives resident on the fur-seal islands are without civilized surroundings and that it is the duty of the government to relieve the situation.

In a residence on these islands for purposes of investigation of more than twelve months' duration distributed over five seasons and a period of seventeen years I failed to discover this lack of civilized comforts noted by Mr. Jones. On the contrary, I enjoyed such comforts to a marked degree, surpassing that which I have found possible at times in home communities of a much larger and more accessible type. I have been quartered in all of the government and company houses on each of the two islands, and there never was a time when I could not get a hot bath for the asking, and on St. Paul Island is the only place where I have ever experienced the delicate attention of having an attendant light a fire in my room before getting up in the morning. These things are specifically mentioned because Mr. Jones specifically notes the absence of bathing facilities and of janitorial service as among the deprivations to which the government officials are subjected.

Speaking of more important matters—morality, temperance, sanitation and personal cleanliness among the natives—if the summer of

1914 found them in the unsatisfactory condition which Mr. Jones emphasizes, the season was certainly an exceptional one. For this there was a very simple reason.

At the close of the season of 1912 the efficient and long-experienced representatives, four in number, who had had charge of the affairs of the government and natives for periods ranging from ten to fifteen years each, were ruthlessly displaced. They were under civil service protection but their discharge was effected by the simple expedient of omitting their salaries from the appropriation bills. In their places were substituted two underpaid caretakers, one for each island. It was ostensibly a matter of economy. Congress had just enacted a law which suspended land sealing for five years. There was no need to continue the full force of expensive agents. The sealing plant and natives could get on by themselves for a time. Such was the argument. No result other than demoralization of the service could have been expected. Mr. Jones himself admits the cause of the trouble by recommending the appointment of a superintendent and assistant superintendent for each island at salaries commensurate with the need of good men, these officers to replace the present caretakers. This is in effect a recommendation to restore the conditions of 1912 and prior to that time. It will be well if the government heeds this suggestion. Even then it will sorely miss the mature experience and capacity of the agents it turned off.

Other criticisms made by Mr. Jones, regarding inefficiency of schools, lack of occupation for the natives, delay in handling cargo, and the like, are referable to the same cause. The government weakened its island force and is suffering the inevitable consequences. Given an efficient management and the "deplorable" conditions will quickly disappear. These conditions have not, as Mr. Jones states, "existed on these islands for years." The men he found occasion to dismiss had been in charge but one season.

Mr. Jones's discussion does not touch the real problem of the Pribilof Islands at all. This has to do with the operation of the fur-seal law of 1912 which suspended land sealing.

As noted, this gave excuse for the dismissal of the responsible agents. It deprived the natives of their regular occupation and means of livelihood, making them the dependent wards of the government. Mr. Jones in a speech to the natives on St. Paul Island, which he includes in his report, calls their attention to the fact that they were receiving from the government supplies to the value of three hundred dollars a year for four days' actual labor. Idleness leads to viciousness and fosters all of the unsatisfactory conditions enumerated.

Mr. Jones does not discuss the fur-seal situation, because this matter was in the hands of a scientific commission. He passes it over in silence. At least twelve thousand killable fur seals, with skins worth approximately fifty dollars each, went to waste on the hauling grounds of the Pribilof Islands in the season of 1914 under Mr. Jones's very eyes. It was a striking thing and deserved notice in his report, especially since the report of the scientific commission has apparently not been published. In comparison with this great loss which the government sustained on the fur seal islands in the summer of 1914, the matters of which Mr. Jones does treat pale into insignificance.

The blue foxes, however, are touched upon by Mr. Jones. These are an important, if subordinate, element in the government's fur industry. The outlook for these animals on St. Paul Island is said to be "bright." On St. George Island, "owing to some fault in feeding," it was not so good, but new breeders were to be brought over from St. Paul to take the place of those which died. The advisability of selling foxes "on bids" to those wishing to engage in fox farming is gravely discussed.

This is all very interesting, but very superficial and inadequate. The blue foxes were left to starve, just the same. The herd has grown to depend largely upon the carcasses of the fur-seal killing grounds for its winter food. Commercial killing had been cut off and the killing fields were bare. The government had taken no steps to replace this food. That was why the foxes on St. George died. They died also on St. Paul. The foxes are cannibalistic under shortage of food, the strong eat the weak,

the old the young. These tragedies occur in the warrens and are not conspicuous. There is simply a diminished herd in the spring. It will be but a fragment, a remnant, of a fox herd which the government will possess when the futile law suspending seal killing has run its course three years hence. The irony of the situation lies in the fact that the foxes, thus cruelly and improvidently treated, yield skins which in 1912 sold as high as one hundred and fifty-eight dollars each. Had Mr. Jones recommended that the government send up beef from Seattle or San Francisco to feed these foxes over the winter, his recommendation would have been one which the government could well afford to consider favorably.

No; the problem of the Pribilof Islands is not one of bringing the comforts of civilized surrounding to the officials and natives. It is rather one of applying common horse sense to the administration of the fur-seal industry. The present ill-advised and wasteful law should be repealed or amended. The fur-seal herd stood ready to yield six hundred thousand dollars worth of sealskins in 1914. Mr. Jones might have had the satisfaction of seeing them taken and their value covered into the treasury. The law prevented it. He has no comment to make. Incidentally the taking of these skins would have given useful occupation to the natives, restored to them and to the foxes their wonted food, and richly earned for the officials and natives of the islands any degree of generous treatment at the hands of the government.

GEORGE ARCHIBALD CLARK

STANFORD UNIVERSITY,
CALIFORNIA

A SAFE METHOD OF USING MERCURY BICHLORIDE FOR THE ANTISEPSIS OF WOUNDS OF LARGE SURFACE

SOME years ago the writer developed what appears to be an entirely safe and very effective method of making antiseptic extensively lacerated areas. Briefly (and I am afraid in very untechnical language) the results of the experiments were as follows:

1. The reason mercury bichloride is dangerous is that it combines with the albumen (?)

of the exposed surface of the wound. For example, if a liter of 1 to 1,000 solution be used to bathe a wound of extensive surface, all the bichloride (roughly speaking), amounting to a gram in weight, is precipitated out of the solution and remains in the wound in the form of albuminate of mercury, which is later redissolved and absorbed. Hence the subsequent poisoning.

2. If, however, the wound be first bathed with a solution having a stronger affinity for albumen than mercury (a dilute solution of chloride of zinc, and other metallic chlorides, was found to give good results) especially one which gives a granular but coherent compound, and is then bathed with water and *finally* with a 1 to 1,000 solution of mercury bichloride, not left in too long, the antiseptis is perfect and there are no bad after-effects. The albumen having combined with the zinc to form albuminate of zinc, seems to be no longer able to quickly combine with the mercury.

3. That mercury bichloride is a much stronger antiseptic relatively to other antiseptics than is stated in the text-books.

4. That antiseptics mixed with oils or fats, vaseline for example, lose their effectiveness almost entirely.

The importance of the matter at the present time (there is no known way of effectively disinfecting wounds received in battle) and the fact that the results were forwarded to the *Lancet* and *Nature* some years ago but not printed or acknowledged is my excuse for asking you to publish this rather crude and incomplete note.

REGINALD A. FESSENDEN

BROOKLINE, MASS.

A SOLAR HALO

TO THE EDITOR OF SCIENCE: On the morning of May 20 an interesting solar halo was observed in the vicinity of Philadelphia, which was sufficiently unusual to be worthy of record. When observed between 11 A.M. and noon the appearance was as indicated in the accompanying diagram. *A* and *B* were two prismatic circles concentric with the sun, of radii (meas-