

Comments and Communications

More on Zoological Nomenclature

My attention has been drawn to the communication from the Steering Committee of the Washington Discussion Group in your issue of December 2, which severely criticized the International Congress of Zoology for having introduced certain reforms into the International Code of Zoological Nomenclature at its meeting held in Paris in July 1948 and the International Commission on Zoological Nomenclature for having advised the congress so to do. This communication contains misstatements on questions of fact which, unless immediately corrected, might easily confuse the real issue involved and thus cause harm to the interests of international cooperation in the field of zoological nomenclature.

(1) The first criticism advanced by your correspondents is that the decisions taken by the congress were taken without preliminary consultation and without an opportunity's being given zoologists generally to express their views. This is not in accordance with the facts. Particular care was taken to gather together, by correspondence or otherwise, the views of zoologists before the opening of the congress. In the case of zoologists in the United States, the steps taken included the special visit paid by myself in the winter of 1947-48 (reported in your issue of December 12, 1947) during which, as secretary to the International Commission, I held a three-day conference at Princeton, New Jersey, with the American members of the commission, followed by a series of conferences, which lasted nearly a week, held at the Smithsonian Institution with your present correspondents, and other conferences with leading American zoologists at New York and Chicago and with paleontologists at Ottawa during the annual meeting of the Paleontological Society. These conferences were all concerned with the subjects to be considered at the Paris congress six months later. It was largely on the basis of these discussions that the agenda for the Paris session was drawn up. Throughout the Paris session, the commission met in public and its meetings were widely attended by zoologists from many countries. In every case affecting either the wording of the International Code or the composition, procedure and functions of the International Commission, the recommendations ultimately adopted by the commission were unanimous, as also was the subsequent endorsement of those recommendations, first by the Section on Nomenclature and second by the congress itself. Whenever there arose an issue on which there was any sign of disagreement, that issue was postponed for further consideration. To argue that the congress was misguided in adopting changes that were unanimously recommended to it by all the zoologists who took part in the work on nomenclature at the Paris congress is therefore tantamount to an uncompromising opposition to all reforms of every sort, even those against which not a single voice, even from among the repre-

sentatives of what is now the Washington Discussion Group, was raised in opposition.

(2) Your correspondents seek to draw a distinction between the permanent members of the commission on the one hand and, on the other hand, the alternate members who, in accordance with established practice, were summoned to the membership of the commission for the duration of the congress in replacement of those of the permanent members of the commission who, by reason of the high cost of travel or prior engagements, were unable to take their places when the commission assembled in Paris. No such distinction is permissible, the congress having made formal provision, as far back as its Budapest meeting in 1927, for the appointment of alternate commissioners, with full voting rights, to replace commissioners who do not attend meetings of the congress. Equally inadmissible is the further contention advanced by your correspondents that matters of importance should be considered by the commission only by correspondence conducted between members of the commission during intercongress periods and that the proceedings of the commission at its actual meetings should be reduced to a formality. For that contention ignores the fact that the commission is a subordinate body of the congress, by which it was established, and that it would accordingly be totally wrong for the commission to adopt a procedure which would make it impossible for it to discharge the duties with which it is charged, when it met during sessions of the congress. Quite apart from this fundamental objection to the procedure advocated by your correspondents, it will be obvious to anyone possessing any experience in the conduct of discussions regarding intrinsically difficult questions that the chance of obtaining a solution by correspondence is extremely remote, the only satisfactory procedure for dealing with such problems being full and free discussion round the table.

(3) I note that at the conclusion of their communication your correspondents go so far as to suggest that in the future reforms of the code should be made not by the congress but by the permanent membership of the commission, acting necessarily by correspondence only, the function proposed to be reserved to the congress being the purely formal role of giving its approval automatically to whatever had been settled behind the scenes during intercongress periods. Few zoologists would regard this suggested procedure as an improvement on the democratic method of free discussion which has hitherto prevailed. Certainly no one can seriously suppose that the commission would lend itself to a revolt of this kind, against the body by which it was set up, still less that the congress would tolerate for an instant such usurpation of its rights.

(4) Zoologists will be glad to learn that, within the next few weeks, the minutes of the meetings of the commission in Paris will be published in the *Bulletin of Zoological Nomenclature*, in accordance with the di-

reactions given by the congress. These minutes will contain a full and detailed record of the proceedings in Paris and particulars of every decision then taken on the recommendation of the commission. A study of this record will enable all who are interested in zoological nomenclature to judge the merits of the individual decisions then taken. It was the hope of the Paris congress that anyone who could advance serious grounds in favor of amending or expanding any of those decisions would submit a reasoned statement of his views to the commission, so that those views might be considered during the present intercongress period with a view to the formulation by the commission of suitable proposals for consideration by the Copenhagen congress in 1953. Prior to the Paris congress some of your present correspondents made a number of valuable suggestions which, on the recommendation of the commission, were approved by the congress and will accordingly find a place in the revised text of the code which, in accordance with the decision of the congress, will be promulgated at the earliest possible date. It is to be hoped that further valuable suggestions will in due course be made by the zoologists who now protest against the action of the congress in giving its unanimous approval to recommendations in the preparation of which they had themselves played a leading and important part.

FRANCIS HEMMING

Secretary to the International Commission on Zoological Nomenclature, London, England

The concern of our sister nomenclature discussion group in Washington over the course of procedure at the 1948 meeting of the International Commission on Zoological Nomenclature in Paris—if the procedure was correctly understood and reported by them—should be shared by systematists generally. This question aside, however, their protest appears to disclose a regard for the past history of nomenclatural practice and procedure, and a concern lest these be changed that the Chicago group¹ does not share. It seems to us that nomenclatural discussion and publication since the turn of the century has to a considerable measure failed to attain the end of a stable nomenclature.

The fable of the Gordian Knot and of Alexander's solution for its unravelment is peculiarly appropriate to the one really basic issue, which is the desirability of conserving familiar names and avoiding confusing changes. Some systematists have sought to achieve stability by strict and unyielding application of the "law" of priority, regardless of its effects on widely used names. Others, finding vast areas of descriptive anatomy and zoological classification in need of critical

work, wish to get forward with what nomenclature is necessary and are willing, in order to conserve such names, to resort to the sword of fiat decision, an instrument that the commission has the power to wield. We believe that Secretary Hemming is inclined to favor its use, and the Chicago group wholeheartedly concurs.

The whole business of elaborate argument over rules and "validity" of names has been a disgrace to zoology and has contributed more than any other single factor to the low repute of systematics among zoologists as a whole. Any system seeking continuity rather than change would have been infinitely preferable to the elaborate search for priority that was established as an international game by the early operations of the commission. No effort was made to establish a nomenclature of the familiar animal types once and for all; and the rules for fixing genotypes were made vague instead of clear, thus permitting wide latitude of opinion in their interpretation. So complicated were they that even Stejneger, a leading nomenclaturist and member of the commission, came up with a surprising number of wrong answers.

Thus the fear of our sister group that "the accomplishments of years in the field of zoological nomenclature will be jeopardized" seems, in the light of current arguments as to the generic name of the lion and of the common eel, to be somewhat disingenuous. Their further fear that "confidence in the International Commission may be lost" is unrealistic, for that confidence has long since been lost: witness the contempt in which the operations of name-changing are held by embryologists, anatomists, ecologists, and others who have a right to expect some measure of common sense from systematists. It will not do to maintain an attitude of aloof contempt for those "who don't know anything about nomenclature." It is admitted by the nomenclaturists themselves that nomenclature is merely a tool, a servant of biology, and not a dictatorial separate entity. Confidence in the commission can, in our opinion, be restored only by prompt and decisive action, and by a reorientation of outlook and procedure based on conservation and continuity, and not on change and confusion.

The fundamental requirement is a reformation in attitude. Strict following of the law of priority, regardless of the consequences, must be set aside as the guiding principle in nomenclatural procedure, both in the thinking of systematists and in the working of the commission. In its stead, there must be substituted a proper regard for the convenience of zoologists generally and a determination, by stabilizing names in current use, to avoid change and chaos. The method lies ready to hand in the device known as the Official List. Any name placed on this list *must not be subject to change for purely nomenclatural reasons*. The Official List has been little used in the past and needs to be greatly expanded. In order to accomplish the required expansion, machinery must be set up whereby, before placing names on the list, the commission can obtain, with reasonable rapidity, a genuinely representative sample of opinion from those workers most concerned and competent to

¹ An informal group associated with Chicago Natural History Museum constitutes a nomenclature discussion group in the Middle West. This statement is signed by W. J. Beecher, E. R. Blake, D. Dwight Davis, Henry S. Dybas, Robert H. Denison, Fritz Haas, Robert F. Inger, Heinz A. Lowenstam, Walter L. Necker, Everett C. Olson, Bryan Patterson, Clifford H. Pope, Austin L. Rand, Eugene S. Richardson, Jr., Colin C. Sanborn, Karl P. Schmidt, Charles H. SeEVERS, Rupert L. Wenzel, Loren P. Woods, Melvin A. Traylor, Jr., and Rainer Zangerl.

judge. We strongly believe that a wider participation in both the machinery and the selection of the commission by systematists is desirable. There are heartening indications in the recent work of the commission that a trend in this direction is setting in and it is earnestly to be hoped that it will continue.

As here envisaged, the expanding Official List would progressively become a sort of 20th Century *Systema Naturae*, a development that should be welcome to all those who regard nomenclature as a means to an end and not as an end in itself.

KARL P. SCHMIDT, for the
CHICAGO DISCUSSION GROUP

Chicago, Illinois

On the points set forth in paragraph 2 by the Nomenclature Discussion Group in Washington we should like to make the following remarks.

(1) The set of stated principles were by no means unknown to zoologists in general, since a great part of the work of the commission was directed toward an incorporation in the *Règles* of the earlier opinions. . . .

(2) Action was taken on individual amendments . . . in order to clarify the *Règles* in cases where the meaning of the present text is ambiguous.

(3) It was entrusted to "jurists" to draft the new formulation of the *Règles* in close cooperation with a special drafting committee consisting of representatives of the commission. The draft so produced is then to be distributed among all the commissioners and alternate commissioners for a three-month study. . . .

(4) The reorganization of the commission is intended to make it easier for interested—and even for opposing—groups of zoologists to be represented and to take an active part. . . .

At the Paris meeting we, the undersigned, represented the Scandinavian zoologists as regard nomenclatorial matters, and we are convinced that an overwhelming majority of these scientists will agree that, after forty years of attempting to follow the strict rules of priority, it has proved impossible thus to stabilize nomenclature except perhaps in a few groups such as birds. So a strong feeling has arisen that the commission should be allowed to work more promptly and on a broader basis. In Scandinavia, therefore, the results obtained at the Paris meeting have been fully accepted and warmly welcomed.

HENNING LEMCHE and RAGNAR SPÄRCK

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The Steering Committee of the Washington Nomenclature Discussion Group in effect condemns the International Commission on Zoological Nomenclature, and especially its secretary, unheard. Both of the undersigned were present as alternates at the Paris meeting of the commission, and it may, therefore, be of some value to other zoologists if we give our views of what took place there. In the first place, we did not recommend to congress "the rewriting of the rules around a set of stated principles"; we took a great number of precise

decisions as to the nature and form of amendments to be made to the rules, leaving only the exact wording to be decided upon later. The principles of the rules remained unaltered. We took "action on a large number of individual amendments" because, being in fact, not merely in name, the commission, it was our duty to do so, indeed, it was for the purpose of taking such action that the commission met; to adopt the course suggested by the Steering Committee would entail that the commission should vote twice on each proposal—once by post and once in session, a most curious and novel idea. We certainly did decide, and most properly in our view, that, having tied up all our decisions as carefully as we could, we would leave it to somebody more competent than ourselves, somebody trained to the task, in fact a jurist, to translate these decisions and amendments into formal language, subject to adequate safeguards; if the Steering Committee can suggest a better, quicker, and more practical way of dealing with this tedious and specialized task, we should be interested; on the other hand zoologists as a whole will, we feel sure, be grateful to have been relieved of a task which very few indeed would claim to be competent to discharge. We did, it is true, recommend congress completely to reorganize the commission, and for this long overdue decision we very gladly accept our share of responsibility. This action should surely be a matter for congratulation; it passes our understanding that it should be a cause of complaint.

The Steering Committee asserts as one of the "basic issues" of its plaint that all this action was taken without any preliminary announcement; it is true that in respect of some few matters no formal printed statement was published to the zoological world setting forth in detail precisely what the commission proposed to do at its Paris meeting. On the other hand, we believe that the members of the Steering Committee, through personal contact with the secretary of the commission the previous winter, were in fact very fully informed . . . and freely endorsed those plans. . . . The second "basic issue" we have already dealt with in the preceding paragraph. The third appears to us to consist of a complex of confusions. To say that there is "no provision" for the congress to review the work of the commission is nonsense; congress controls the commission. Zoologists present at the congress had on this occasion for the first time double opportunities to review the work of the commission; they could (and many did) attend its meetings, and they could have raised any issue they wished at the final plenary session. The one member of the Steering Committee who attended all these meetings contributed nothing by word or deed to any of them. The "regular commission" to which the Steering Committee so often refers is in a different position, for it is always, either by direct discussion when in session, or by post between sessions, able to review its own work to its heart's content, we presume. There are not two commissions, as the Steering Committee would lead us to believe, a competent "regular" one which is continually in existence, temporarily replaced at congresses by a specious substitute, but only one commission

throughout. The invidious innuendo contained in the committee's references to "regular" commissioners we most strongly resent. . . . We venture to doubt whether the opinions expressed in the Steering Committee's article are generally accepted even in the United States. They are certainly not shared by zoologists in Britain nor, so far as we can ascertain, in any other country.

EDWARD HINDLE² and N. D. RILEY³

London, England

Allow me, please, as a commissioner of the International Commission on Zoological Nomenclature, and as an Italian zoologist, to express my point of view.

My task is of course somewhat difficult, because of the fact that the N.D.G. has assumed the advantageous position of attacker; it makes some bold affirmations, without giving any proof of the truth of what it says, and it puts opponents in the position of being obliged, in answering, to prove what they say.

In the first place the N.D.G. in emphasizing that the International Commission, at the Paris Session, consisted of four regular members and eight or nine alternates, implies a doubt of the capacity of alternates to fulfill their task. The alternates were not appointed without previous consideration; the commissioners, if unable to take part in the congress, had been invited themselves to nominate their alternates, who, therefore, ought to be prepared for their task, not only because of their personal competence, but also by reason of instructions received from the commissioners.

The N.D.G. states that "the most momentous actions of a half-century in zoological nomenclature were taken at Paris." This implies, to persons not acquainted with the facts, that the International Rules of Zoological Nomenclature were, at least, basically changed. Nothing of the sort. Such change of the rules was out of the question. It is true, indeed, that the actual wording of the rules often permitted different interpretations and that many articles seemed partially to contradict others. These deficiencies in the rules are well known to every zoologist, and have been discussed many times, so that every zoologist might reasonably be expected to be acquainted with them. It is these deficiencies that the commission tried to eliminate at Paris, giving to the rules a clearer wording.

It is not true that actions were undertaken without notice to zoologists or to commissioners. Mr. Hemming, the secretary, had an extensive correspondence with the commissioners . . . many cases were actually resolved on the lines suggested by Dr. Blackwelder, the secretary of the N.D.G. . . .

The N.D.G. states, finally, that "if [such actions] are allowed to stand, international cooperation in nomencla-

ture will be a farce, the confidence upon which support of the commission has been based will be lost." I find that it is rather a farce that a group of zoologists of a single country (not *all* the zoologists of that country, because there were many American zoologists, both in the Commission and in the Nomenclature Section, who fully agree with the action of the Commission) dares to speak in the name of "international cooperation" against the work of a commission where eight nations (U.S.A., the United Kingdom, Italy, Denmark, Netherlands, Belgium, Portugal, and Mexico) were represented, and which was supported by the approval of the Section on Nomenclature, where there were, in addition, Canadian, French, Swiss, and Egyptian members, and of the congress, where zoologists from all countries were present.

As far as the confidence of zoologists is concerned, I may say that, at least in my country, the commission was falling into the utmost discredit and zoologists were even coming to doubt the possibility of observing the International Rules, because of the well-known slowness with which the commission decided (or did not decide) cases submitted to it. The action of the commission in Paris has, given Italian zoologists new confidence in the commission, as may be seen from two declarations, one made by the *Unione Zoologica Italiana* and the other by the *Società dei Naturalisti di Napoli*, in which Italian zoologists express their wish that the revised rules may be published without delay; should the commission fail to do this, it would lose, I think, all its authority, at least among Italian zoologists.

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As a commissioner present and voting in Paris, I wish to correct certain erroneous impressions given by the letter appearing in *Science*, December 2, 1949, from the Nomenclature Discussion Group, Washington, D. C.

The program presented by the secretary followed the lines endorsed at a meeting with the American Commissioners in 1947. Many details reflected the wishes of American zoologists as gathered by the secretary from correspondence and extended personal discussion not only with the Washington group, but at the Chicago meetings of the AAAS, at the Ottawa meeting of geologists in 1947, and with the staff of the American Museum of Natural History. Past congresses have taken actions importantly affecting nomenclature without such announcement.

The principles adopted were clear; if hastily worded at the moment, they would not have been clear. *Advisory* wording was left to jurists, actual and final wording to an editorial committee of the commission. . . .

The representation was widely international and included zoologists of eminence. There was prevalent a striking feeling of friendly international cooperation. Those present had the enthusiastic feeling that an important step forward had been made both in international good will and in the service of zoologists. Nothing was

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³ Keeper of the Department of Entomology, British Museum (Natural History), secretary of the Royal Entomological Society of London, of the Permanent Committee of Entomological Congress, and of the Entomological Section of the International Union of Biological Sciences.

⁴ Member of the International Commission on Zoological Nomenclature, ordinary professor of zoology in the University of Parma.

reported to the congress that did not have the *unanimous* support of both the commission and the Section on Nomenclature.

Proof of the minutes of the session (approximately 650 printed pages), unavoidably delayed, is now in the hands of each commissioner, and after a short period allowed for approval will be at once published in the *Bulletin of*

Zoological Nomenclature. The secretary suggested the Washington group await appearance of the minutes before they published anything. It is regrettable that they have not seen fit to do so.

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A letter was also received from Pierre Bonnet, professor in the Zoology Laboratory, Faculty of Sciences, Toulouse, France, who expressed his astonishment at the views of the Washington Discussion Group and supported the decisions of the congress for reasons already stated in the other letters published here.

(Continued from page 225.)

2. *Clearance procedures should be confined to sensitive areas.* Attempts to extend security measures into nonsecret areas reflect the fear that dominates the attitude of large sections of the public and the press. The SCLP is convinced that such an extension of the security program would not benefit the national security and in fact would be harmful to the nation's best interests. In particular, it is hoped that no clearance will be required for nonsecret work under

the proposed National Science Foundation.

3. *Scientists should take an active interest in the security program.* Much of the improvement in procedures evident since the war has presumably resulted from the strong recommendations made by scientists and others concerned. Individuals in universities and in industry can promote further improvements by familiarizing themselves with the clearance situation in their environment and by urging specific reforms.

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4. AEC information for the press No. 151, January 5, 1949.
5. Air Force Regulation No. 40-12, September 15, 1948.
6. Criteria governing actions by IERB, November 7, 1949.
7. Executive Order 9835, *Federal Register*, 1947, 1935.
8. Interview, October 25, 1948, between representatives of Fed. Amer. Sci. (Higinbotham, W. and Splnrad, B.) and of AEC (Bacher, R. *et al.*).
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11. ——— *Phys. Today*, 1949, **2**, 3.
12. ——— *Bull. Atom. Sci.*, 1949, **5**, 299.
13. ——— *Science*, 1949, **109**, 621.

