Comments and Communications

Adventures in Mailing Science

When a member of the Association receives copies of Science through the mails, he often wonders whether it would not be better if they were sent by first-class mail or at least in manila envelopes. If only a few hundred copies were mailed each week, the answer would be obvious. But more than 32,000 copies are mailed to subscribers each Friday. Their total weight is about 6,400 pounds, or 3.2 tons. The cost of sending 6,400 pounds by first-class mail would be more than \$3,000, or \$156,000 per year.

Fortunately, such publications as *Science* are classified as second-class mail, the postage on which in the first zone is 1.5 cents per pound. In the case of nonprofit organizations, such as the Association, the second-class rate is the same in all postal zones in the United States. The postal rates for foreign countries, except those of the Western Hemisphere, are much higher. The Association has members in 76 foreign countries. The total postage per issue of *Science* is \$186, nearly half of which is for copies sent to foreign countries.

The use of manila envelopes for mailing *Science* would add to the mailing costs about \$17,000 per year. The total additional cost would be made up of four items: (a) the envelopes, (b) printing on them the postal requirements, (c) the labor of inserting the tons of copies of *Science* in them, and (d) the additional postage because of the weight of the envelopes (about 1,000 pounds per issue of 32,000 copies).

A compromise would be to use manila wrappers. The additional cost would be four items corresponding to those if manila envelopes were used, but somewhat smaller. Nevertheless, the additional cost of mailing would be several thousand dollars per year.

Many letters from members have been received in the past two years, stating that their copies of *Science* were received in bad condition. A large majority of the letters have been courteous descriptions of the conditions in which *Science* had been received from employees of the U. S. Postal Authorities, with the request that the Association undertake to remedy the defects.

The Association has examined all possibilities that do not entail prohibitive expenses. Last January a 70pound cover was placed on *Science*, with the result that thereafter an average of only about 5 copies out of 32, 000 mailed each week are mutilated to such an extent that the recipients complain or ask for duplicate copies. All requests for replacements of mutilated copies are promptly filled.

Occasionally copies of *Science* mailed to a particular post office are entirely missing or badly mutilated. Complaints were received from a university town that the members of one department received very few copies of Science. They naturally asked the Association to correct its errors. Upon inquiry it was found that the difficulty was entirely in the local post office, which was reported to lack sufficient help to handle its second-class mail. No complaints have been received since the local post office was informed that *Science* is a scientific journal instead of releases of a promotional nature.

In order to get reliable information about what has been happening to *Science* and why it has been happening, the Association recently made an extensive experiment covering the whole country, including post offices to which many copies of *Science* are mailed and those to which only one or two are mailed. Under the postal regulations, if five or more copies of a publication, such as *Science*, are addressed to one post office, they must be tied in bundles by the printers before delivery to the post office. So many copies of *Science* are mailed to the larger cities that the printers fill entire mail sacks with copies of *Science* alone. It is clear that in such cases the damage to *Science* or the loss of copies occurs in the post office of final delivery or in attempts of mail carriers to place publications in inadequate mail boxes.

Now to return to the experiment! Three copies of the October 15 issue of *Science* were sent to members residing in different parts of the United States, as explained above. One copy was the regular issue sent to more than 32,000 subscribers. The two other copies differed from the regular copy only in the cover stock and paper of the interior. The recipients were notified in advance that they would receive the three copies and were asked to return promptly *all three* of them to the office of the Association in the large manila envelopes which were enclosed, addressed, and stamped for their use. About two-thirds of those chosen for the experiment have returned the copies mailed to them from the printers, and each of them has been sent a regular copy in place of the regular copy returned.

The results of the experiment are, briefly, as follows: The copies having a 70-pound cover were in nearly all cases in excellent, or at least good, condition. About two-thirds of those having 60-pound covers were in good condition; those mailed in 50-pound covers were all in bad or very bad condition. The degree to which copies are mutilated is independent of the distance. The conclusion reached from this experiment is that good 70pound cover stock should give satisfactory results.

In view of the fact that all three copies to each participant in the experiment were mailed simultaneously, some of the results are difficult to explain. For example, of the three copies sent to Wichita, Kansas, the 70-pound cover was the only one torn appreciably. One of the three copies sent to Ann Arbor, also the one with the 70-pound cover, was not received. The copy with 70-pound cover sent to Dallas, Texas, was not returned. Of the three copies sent to Pittsburgh, the copy having a 70-pound cover was in excellent condition, whereas the covers of the other copies were torn completely off. In contrast, all three copies sent to Pasadena, California, were returned in perfect condition. Three participants in the experiment did not return their copies having the 70pound cover. Only one copy was reported as having a dirty cover, and that was the one with the 70-pound cover of the three mailed to Evanston, Illinois.

In spite of the information presented, the question might still be raised why the Association does not mail its journal in wrappers. The estimate of the cost of printing and mailing *Science* in 1949, exclusive of editorial costs, accounting, and addressograph supplies and labor, is \$175,000 for an average of 35,000 copies per issue. The present mailing exceeds 32,000 copies per issue.

The average cost for printing and mailing Science in 1949 will be, according to forecasts, 9.6 cents per copy, or \$5.00 per year. Only \$1.50 of a member's dues of \$6.50 remains available for all the other expenses of the Association, an amount that would be quite insufficient if it were not for advertising in both Science and The Scientific Monthly. The Scientific Monthly has a circulation of nearly 20,000, or more than Science had four years ago. Since the readers of the two journals do not differ appreciably in scientific standing or scientific interests and fewer than 1 in 20 subscribe for both journals, Science and The Scientific Monthly are equally good advertising media in proportion to their circulations.

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Australian Sod Fly Introduced Into California (Diptera: Stratiomyidae)

In response to a request for the identification of some peculiar flies collected by the writer at San Francisco, California, Dr. Maurice T. James, associate professor of entomology at The State College of Washington and authority on the Stratiomyidae, communicated the following very interesting information which may prove to be of considerable economic importance. Dr. James writes: "The fly collected at San Francisco is Metoponia rubriceps Macq., a common species in Australia, where it breeds in sod. I have never before seen it from the New World. Apparently, the larvae were brought in in soil and have become established in the San Francisco area. The immature forms are well known. For a good description of them and their biology I can refer you to the following paper, 'Irwin-Smith, Vera. 1920. Proc. Linn. Soc. New South Wales.' "

These insects were discovered in San Francisco by the writer on September 21, 1948, crawling about on a lawn bordering Park Presidio Boulevard adjacent to Golden Gate Park. Only three specimens were taken at that time, two of them being females. Two additional females were captured a few days later by Dr. Edward S. Ross, curator of insects in the California Academy of Sciences. These he found flying low over lawns in Golden Gate Park. During the same week Mr. Kenneth Innes, a student at the University of San Francisco, found a female fouled in wet paint at his home, not far from the Park.

Attempts to find more of the flies failed until the morning of October 7, when the writer discovered them in abundance on the campus of the University of San Francisco, several blocks distant from where the first

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flies had been found. The morning was sunny and sultry. The males were very active, most of them either flying a few inches above the lawn or crowding vantage points on dandelion stems. They were so numerous that a single stroke of the net captured a dozen or more specimens. The females, by contrast, were seen to take wing only occasionally and then only for flights of a few feet. While several sweeps of the net yielded a total of some 100 males, only three females were captured with them. Most of the females merely crawled about on the lawn until they were besieged by the males. A number of mated pairs were observed in the grass. For several days thereafter flies of this same species were found on the same lawn but never in the same abundance. None was observed after October 19.

Irwin-Smith (loc. cit.) states that in Australia this species has two broods per year, one appearing in the spring and the other in the autumn. However, she found larvae of varying sizes occurring at all periods of the year and noted that the larval period requires several months, perhaps a year or more. Moreover, she observed the larvae feeding on grass roots and concluded: "It is evident that their main, if not only, source of nourishment is in the juices of the living plant." While these flies appear to do no serious damage to the lawns which they infest in Australia, in America they should be regarded with suspicion as insect immigrants with important economic potentialities. Consequently, they should be watched carefully in this new environment, where they are away from their natural enemies.

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If This Be Treason-

Never advise a man to go to war or to marry. So runs a proverb at least two centuries old, which I have no intention of transgressing. It may, however, be high time to raise this question: Have not we oldsters gone too far in advocating total abstinence?

For the third time in 30 years I am listening to the arguments against drafting for military service young scientists or young men who have made a gesture toward science. By this time I have heard them all. Never yet have I heard one that did not seem to apply equally to young carpenters, electricians, or plumbers. Worse still, the proponents of these mass exemptions seem to have overlooked what may be very important facts. These young men with an interest in science are human beings. Many of them are also American citizens.

Lately our psychologists have done many interesting things. They have not yet, however, given us even a preliminary report on the present morale and professional efficiency of the men who took their chances in uniform, either by enlistment or draft, as compared with mentally comparable men who sought and secured draft exemption through their importance to any one of a dozen "war essential" projects. Special study might well be given also to the mental condition of the young men who were