insectary during the winter months. Without light 24 hr a day, the females will (1) not feed, (2) refuse to lay eggs, or (3) lay infertile eggs.

In continuous electric light and favorable laboratory conditions, fertilization and the deposition of fertile eggs do take place, although at a noticeably slower rate than in the summer. The reduced fertility is also marked in comparison with the behavior of *C. quinquefasciatus,* which in our stocks, at least, does not seem to possess this characteristic.

Culex quinquefasciatus

Three stocks of this species are currently maintained. One is the Galveston, Texas, stock described above. A second originated from a single egg raft from Bakersfield, Calif., obtained through the courtesy of R. E. Bellamy and Lewis W. Isaak. The third was obtained from Albert Miller at Tulane University. As far as we can tell, these three stocks are exactly alike in their biological characteristics. All breed readily in cages 30 × 30 × 30 cm and are therefore stenogamic. All three require a blood meal before egg deposition, and are hence anautogenous. They feed avidly on both pigeons and chickens, at almost any time of the day, as well as at night. The Galveston strain will bite man reluctantly; the other two have not been tested in this regard. As noted above, none of these strains shows any evidence of a seasonal pause in reproductive activity.

The stocks maintained in this laboratory, therefore, might be of use in various types of experiments in which stabilization of the genetic background of the strain is desirable.

Reference

1. WRIGHT, S. *Genetics,* **6**, 111 (1921).

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Comments and Communications

Vitality of the Aged

C. H. FORSYTH has presented a note (SCIENCE, **115**, 251 [1952]) indicating that in contrast with the conclusions of his earlier study (SCIENCE, **70**, 85 [1929]) mortality of the aged now seems to be improving. He concludes that, from 1890 on, mortality increased and reached a maximum between 1910 and 1920 and, since then, has been improving (i.e., rates have been decreasing).

Forsyth's data are for seven selected states and do not extend beyond 1940. Actual analysis for the entire United States is now possible for the last two decades. During the 1940s there was a rather astounding improvement; this will be definitely indicated when the official life tables based on the 1950 census and vital statistics for 1949–51 are available.

Table 1 gives death rates comparable to Forsyth's, based on official life tables from 1900 through 1940, with the 1948 data developed from official abridged tables. The fact that there are different areas covered in the various years can be taken into account since data for all areas are available for 1929–31 and can be compared. The table shows no evidence of significant changes in mortality of the aged from 1900 through 1930. The low rate for 1919–21 is not especially significant because, as has been pointed out in many places, this was related to the high influenza mortality of 1918, which removed rather prematurely the somewhat impaired lives. Differences in rates in the years before 1930 appear to be due mainly to statistical fluctuations; it should be recognized in any event that mortality rates for ages 70 and over, especially in small population groups such as Forsyth dealt with, are not too reliable because of the relatively small numbers involved, not to mention errors in reporting.

Since 1930, there seems to have been a definite improvement for all categories, and especially for women. The mortality rates for 1948 are well below those for the early part of the century and apparently by much greater amounts than can be attributed to random fluctuations. Data for years between 1940 and 1948 have also been analyzed and show the same general trend.

The earlier Forsyth article draws some conclusions that, in retrospect, seem rather surprising. Forsyth then concluded that "the whole picture, from our earliest records in 1890 to the present time, points constantly and inevitably to a future declining average length of life until the American adult wakes up to the fact that the odds are at present heavily against his living as long as his father or grandfather." Further, he states that the decline in longevity at advanced ages "already dominates and the average length of life—or at least the expectation from age ten—is already going down."

Table 2 shows the opposite to be true. The expectation at age 20 has risen steadily and significantly throughout the entire period for both men and women, and the increase over the past half-century amounts to about 15% for men and 20% for women. The expectations for men aged 50 and 70, and for women aged 70 remained more or less constant over the first 30 years of this century, but since 1930 have risen definitely and significantly. The expectation for women aged 50 increased slowly during the first 30 years of the century and more rapidly thereafter.

This analysis corroborates Forsyth's conclusion that mortality among the aged has improved since about 1915—in fact, later data strengthen his conclusion. However, the statistical evidence indicates that there was no significant worsening of mortality among the

TABLE 1

U. S. DEATH RATES (Per 10,000)

Year	Area	White male		White female	
		Age 70	Age 80	Age 70	Age 80
1900–02	Original registration states	589	1335	537	1211
1909–11	" " "	621	1358	566	1258
1919–21	Registration states of 1920	546	1197	502	1134
1929–31	Original registration states	609	1336	520	1210
1929–31	Registration states of 1920	585	1298	492	1173
1929–31	Total United States	580	1300	487	1174
1939–41	" " "	545	1247	423	1082
1948	" " "	532	1107	367	905

TABLE 2

LIFE EXPECTANCY (U. S.)

Year	Area	White male			White female		
		Age 20	Age 50	Age 70	Age 20	Age 50	Age 70
1900–02	Original registration states	42.19	20.76	9.03	43.77	21.89	9.59
1909–11	" " "	42.71	20.39	8.83	44.88	21.74	9.38
1919–21	Registration states of 1920	45.69	22.22	9.51	46.46	23.12	9.94
1929–31	Original registration states	45.50	20.84	8.95	47.96	22.69	9.69
1929–31	Registration states of 1920	45.92	21.39	9.17	48.47	23.29	9.93
1929–31	Total United States	46.02	21.51	9.20	48.52	23.41	9.98
1939–41	" " "	47.76	21.96	9.42	51.38	24.72	10.50
1948	" " "	48.97	22.44	9.76	53.80	26.16	11.17

aged during the early part of the century, but rather that the changes shown reflect accidental fluctuations rather than any long-term trend. Moreover, the data presented show that Forsyth's pessimistic 1929 conclusions as to a long-term decline in the average length of life for adults were as much in error as some of the rosy economic predictions also made then.

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Science and Technology in Unesco

THE NRC Committee on Unesco was asked to participate in the program planning and execution for the Third National Conference of the U. S. National Commission for Unesco on Jan. 27–30, 1952. J. S. Nicholas was asked to be chairman of the scientists and engineers panel, and M. B. Visscher was asked to be the discussion leader for Work Group 9, which comprised the scientists and engineers. A document was prepared comprising the conclusions and recommendations of this work group on the topic assigned—namely, "The Opportunity for Scientists and Engineers to Contribute to Peace Through the United Nations System."

There was an attendance of approximately 100 scientists and engineers at the meeting that developed this document, and the precise statements were approved unanimously by the members of the work group before they were accepted for inclusion in the attached statement. This fact is of some importance, because it indicates that it was possible to obtain unanimity of opinion with regard to several very basic questions. The supplementary Work Group 9 report by the Engineers Joint Council was prepared by the engineers subcommittee of the work group and is referred to in Item 7 of the main report.

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The Medical School
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Third National Conference

United States National Commission for UNESCO

Work Group 9

The Opportunities for Scientists and Engineers to Contribute to Peace through the United Nations System

The conclusions and recommendations were formulated by representatives of the basic sciences, various fields of applied science, including the engineering sciences:

1. *The Place of Science and Technology in UNESCO.* Science and technology are by custom and historical tradition international cooperative enterprises. The scientific method is universal; accordingly, no group or nation can claim unique interest in it. The results of scientific study are of immediate or potential value to all nations. The promotion of science for its own sake is not the prime objective of UNESCO; however, the chartered objective of UNESCO cannot be achieved without encouraging or