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ROCKETS AND MISSILES

1959 Space Score: 11 to 3, U. S. Favor

AT THE END of the 12th inning of 1959, the space score stood 11 to 3, in favor of the U. S.

In 1959 Russia launched only three space experiments successfully. But all were spectacular when viewed from anybody's standpoint.

With Lunik I, Russia orbited 794 pounds of scientific instruments that swept past the moon and went into a 15-month orbit around the sun. With Lunik II, the Soviet Union became the first nation to put personal property on the moon. Someday an exploring party may find Russian-made metal emblems scattered about the Sea of Tranquillity. With Lunik III, Russia demonstrated championship guidance technique by boomeranging a satellite around the moon and taking the first picture of the moon's previously unseen side.

The U. S. played less spectacular space ball but batted in more runs:

1. Successful launching of six Discoverer satellites aimed at sustaining biological life in space and developing practical recovery techniques.

2. Successful launching of two Vanguard rockets for studying the earth's cloud cover, magnetic field, solar X-rays and conditions in space.

3. Successful launching of two Explorer satellites measuring earth radiation, cloud cover, magnetic fields, behavior of radio waves, earth's radiation balance, hazards of meteors and space temperatures.

4. Successful launching of Pioneer IV, now orbiting the sun and measuring radiation in space.

Science News Letter, January 16, 1960

BIOLOGY

Russians Raise Ostriches For Food and Feathers

THE AMERICAN ostrich appears to be doing well in Russia. In fact, a flock has adjusted so well to the climate that researchers there believe the birds can provide edible and nutritious meat, large eggs and ornamental feathers.

The Nandu or *Rhea americana* as the bird is scientifically named, is being raised in Askanya-Nova—in the Ukrainian part of Russia—report A. A. Salgansky and L. A. Salganskaya. In winter they are confined, but let out in enclosed pastures for the rest of the year. The pasturing period is about 175 days long, with grain making up the major part of their feed.

The number of eggs ranges from 16 to 24, with an average weight of 500 grams or 17 ounces. The young chicks appear to grow rapidly in their Russian home. They grow accustomed to caretakers, are easy to herd, move about and weigh. The weight of chicks at hatching averages 400 grams. At four months of age their average weight increases to five kilograms.

One problem faced by the Russian researchers, and reported in the journal *Priroda*, a semi-popular magazine published by the U.S.S.R. Academy of Science, is the effect of inbreeding.

Low-fertility, low viability of eggs, lowered vitality of young, and greater number and variety of deformities are some of the effects of close inbreeding. It is desirable to bring in outside blood for the flock, the Russians suggest. These could be brought in either from the ostriches' native land in South American tropical jungles or from European zoos.

The researchers also point out that building up a flock of the ostriches, now rare in South America, may save the bird from extinction. They recommend construction of a special farm for semidomesticated maintenance of the Nandu.

Science News Letter, January 16, 1960

SCIENCE NEWS LETTER

VOL. 77 JANUARY 16, 1960 No. 3

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7 1/2 cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

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Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



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