

Missing sea otters

Shortly after the controversial Cannikin nuclear test on the Aleutian island of Amchitka last November, the Atomic Energy Commission reported that the bodies of only 18 sea otters had been found. The AEC noted, however, that aerial counts showed a decrease in the number of otters near the Cannikin site after the test.

Now an AEC-sponsored survey conducted in May and June of this year shows that otter casualties may have been much higher than suggested by earlier body counts. The highest of several otter counts along a 10-mile coast of the island was 425 animals. By contrast, researchers in June 1971 counted as many as 1,215 otters. The AEC believes the decline is largely a result of the Cannikin explosion and that it probably represents otters killed, rather than simply chased away.

Nobody appears to believe the otter population is endangered, however. A state game biologist says otters appear to be returning to the area. Another population count this fall may give more definitive results. □

Venus 8 lands

The Soviet Union successfully landed its second spacecraft on the surface of Venus July 22. Venus 8 was launched March 28 from Kazakhstan (SN: 4/1/72, p. 216).

According to Tass, the craft recorded data about the planet's atmosphere during its parachute descent. It landed on the day side of the planet and transmitted for 50 minutes from the surface. Tass did not say whether the instruments were turned off at that time or whether Venus 8 stopped transmitting because of some difficulty. The craft carried instruments to determine the brightness, pressure and temperature of the atmosphere and surface as well as the physical properties of surface material.

During its 300-million-kilometer journey, Venus 8 transmitted data to earth about solar radiation and the hydrogen halo around Venus.

Venus 7 landed Dec. 15, 1970, and transmitted for 23 minutes. Mars 3 soft landed on Mars in December, but transmission ceased after a few seconds. □

films OF THE WEEK

BARNET (THE CHILD). 16mm, color, sound, 48 min. Presents a complete account of the conception, gestation, and birth of a child, including the delivery. The film uses animation to explain conception and actual photographs explain the development of the fetus. These sequences are counterpointed with those which document the pregnancy and show what the expectant mother must do for proper prenatal care. When the young woman goes into labor, her husband takes her to the hospital and assists throughout the delivery. Audience: schools, health and welfare departments, PTA's, departments of education, child and maternal care departments, and prenatal clinics. Purchase \$675 or rental \$75 from International Film Bureau, Dept. SN, 332 S. Michigan Ave., Chicago, Ill. 60604.

EVOLUTION AND THE ORIGIN OF LIFE. 16mm, color, sound, 35 min. A comprehensive capsulization of evolution and the origin of life featuring cinemicroscopy, time-lapse photography, special-effects animation, macro-photography, and nature footage. The combination gives a panorama of the universe's ten-billion-year history. Begins with a visit to Darwin's study, a discussion of natural selection, and a filmed visit to the Galápagos Islands. Dr. Paul Saltman then discusses mutation and its role in evolution. The viewer is then taken back to the beginning—with the "Big Bang" theory being dramatically animated. Audience: educational, instructional and general viewing. Purchase \$325 or rental \$30 from CRM Productions, Dept. SN, 9263 West Third St., Beverly Hills, Calif. 90210.

HEAT FOR BEGINNERS. 16mm, color or b&w, sound, 11 min. Introduces the subject of heat, showing its most important sources, how it travels, and examples of energy transfer which young children can understand. They see that heat travels from hot things to cold things that it moves faster through some materials than others; and that it makes both temporary and permanent changes in materials. Pictures of heat causing water to boil, butter and a candle to melt, and air in a balloon to rise—demonstrate the expansion of liquids, solids and gases. Heat used to cook food such as eggs and popcorn shows the permanent changes which result in some substances. Film proceeds from the key idea of heat as the transfer of energy. Audience: primary. Purchase color \$140 and b&w \$70 from Coronet Films, Dept. SN, 65 E. South Water St., Chicago, Ill. 60601.

INDIANS IN THE AMERICAS. 16mm, color, sound, 15 min. It is believed that the first American migrated to these continents from Asia over 20,000 years ago. The first arrivals were probably hunters; but as centuries passed, the Indians developed agriculture and advanced civilization such as those of the Mayans and the Incas. They settled as far south as the tip of South America, and remained as far north as Alaska. The film examines many of the contributions of the Indian to American heritage and to the world. Audience: elementary, high school. Purchase \$215 or rental \$12 from BFA Educational Media, Dept. SN, 2211 Michigan Ave., Santa Monica, Calif. 90404.

JONAS SALK. 16mm, color, sound, 30 min. Jonas Salk, the developer of polio vaccine, describes his current research to find a cancer cure, and ponders science's capability to prolong and destroy human life. He is interviewed by Dr. Paul Saltman of Revelle College at the University of California at San Diego. Dr. Salt explains his concept of the scientist in today's society. The discussion deals with questions vitally important today. Purchase \$350 from ACI Films, Dept. SN, 35 W. 45th St., New York, N.Y. 10036

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

ERTS satellite

ERTS is finally launched.

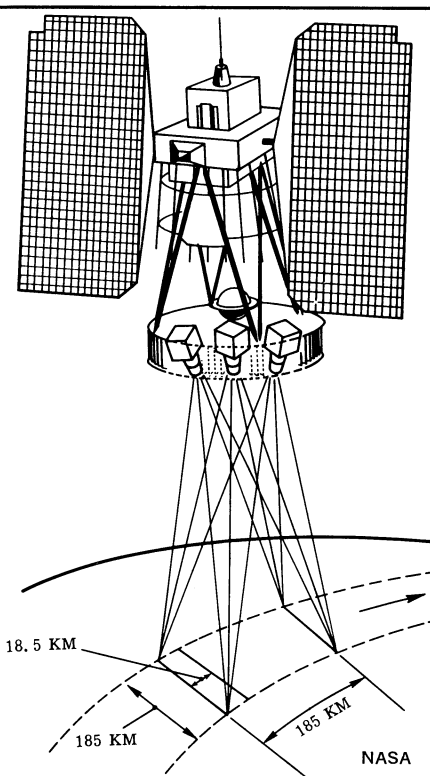
After numerous delays for technical problems over the last five months, the first Earth Resources Technology Satellite (SN: 6/24/72, p. 408) finally got off the ground July 23. It was launched into a near-polar orbit from the Western Test Range.

The imagery that ERTS cameras began sending to ground stations this week are not the first pictures from space of the earth's surface. But with the exception of some experimental photography taken in the manned space program, this earth-imagery is the first for worldwide civilian applications to the earth's resources. After 14 years of earth-orbital satellite technology, that in itself says a lot.

ERTS has two multispectral sensors—the multispectral scanner subsystem and the return beam vidicon subsystem. They will obtain images in two visible wavelength bands, two near infrared bands and one longer wavelength also in the near infrared.

The band 5,000 to 6,000 angstroms is in the green range of the spectrum. In this band experimenters can see features such as sedimentation within water. They might be able to see the ocean bottom in some areas.

The second band, 6,000 to 7,000 angstroms is red. It is good for seeing through the atmosphere to



the surface, because light-scattering is less in the red than in the green. Many manmade structures appear very bright while vegetation shows up dark.

The third and fourth bands, 7,000 to 11,000 angstroms are in the near infrared portions of the spectrum and invisible to the eye. Water appears black while vegetation appears bright.