

MICROPROCESSOR MICROPROGRAMMING HANDBOOK



An authoritative, practical guide to microprocessor construction, operation, programming, and applications

Tells what microprocessors are, how they work, where they're used, and how YOU can use them in your own applications! Shows you how to write the necessary programs (called microprograms) to allow your microprocessor to process and manipulate information, simulate control processes, and emulate other machines. Covers every aspect of microprocessors—inside and out, shows the essential characteristics of a computer system, highlighting the basic operational blocks and describing their functions. It explains the basic operating cycle, timing sequences, the flow of instructions and data, and illustrates basic microprogramming techniques to build up program loops, subroutines and handle interrupts from other peripheral devices. 294 pps., 176 illus. Hardbound. Only \$9.95.

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Wilds of Tibetan plateau: Natural zoo



Photos: China Features, Peking

Chinese survey finds flocks of birds, herds of donkeys, living on high, cold plateau.

While there may not be life on Mars, there is a surprising amount of wild life on the cold, largely uninhabited plateau of northern Tibet. Long considered an arid land, extremely deficient in even plant life, the plateau is now being called a natural zoo.

An expedition organized by the Chinese Academy of Sciences scoured the 300,000 kilometer area last summer. The surveyors discovered herds of antelope, sheep and wild asses galloping on the grasslands. They also report that hares, foxes, leopards and bears roam the mountains and waterfowl swim on the lakes. Even a high-altitude fish, the Tibetan loach, lives in mountain brooks 5,200 meters (17,000 feet) above sea level.

Although foreign scholars who visited the area before 1949 claimed that the plateau sustained less than 50 types of plants, the Chinese scientists collected

300 different plant specimens. The highest, coldest tip of the plateau alone contained more than 100 varieties. Some of these plants have adapted to the climate by lying low. The scientists report seeing shrubs less than 20 centimeters high but with branches spreading for 2 meters.

Life is by no means a recent development on the Tibetan plateau. The survey discovered fossils of marine animals and protozoa in Paleozoic and Mesozoic rocks. It also uncovered sites of prehistoric culture located high on the plateau.

Outcrops of chromium, magnetite and other metals were discovered, as well as numerous lakes rich with minerals. "The vast northern Tibetan plateau abounds in natural resources that might well be tapped," a report to SCIENCE NEWS from China Features concludes. "The scientific expedition has advanced suggestions for their exploitation." □