

## **SCIENCE SCREEN REPORT      VOLUME 30**

### **1 CONSERVATION: MISSION MANATEE**

The manatee, although it has no natural predators and no defenses against humans, is one of nature's most gentle creatures. Yet the manatee's future survival remains uncertain. This issue of SCIENCE SCREEN REPORT will take students on a journey to study the nature and habits of manatees. We'll also take a look at how using satellite technology from NASA will play a key role in ensuring that manatees will remain with us for generations to come. 14:17

### **2 ENERGY: HEAT BENEATH OUR FEET**

We are dependent on energy to keep life on Earth functioning. As fossil fuels are used up, renewable energy sources such as solar, wind and geothermal energy must be created. This edition of SCIENCE SCREEN REPORT investigates the formation of hot dry rocks, possible heating elements of future geothermal power plants. Students will see the technology that will enable us to mine them for heat, and the latest techniques being used to locate them. 14:20

### **3 BOTANY: TREE FROM THE AGE OF DINOSAURS**

Thought to be extinct for some fifty million years, the Wollemi Pine is providing scientists with amazing data. The very existence of this "green dinosaur" and the more than fifty species of fungi it harbors has raised questions that will take years for researchers to answer. In the meantime, the survival of the grove in Australia's Blue Mountains must be assured. SCIENCE SCREEN REPORT will take you there to explore this extraordinary tree whose history goes back a hundred million years. 12:51

### **4 EARTH SCIENCE: LEARNING ABOUT EARTH'S WEATHER**

One of the most unique features of our planet is its weather. Earth's diverse but consistent climate creates just the right conditions for life to flourish. But, what causes the formation of weather and how are global weather patterns established? This edition of SCIENCE SCREEN REPORT answers these questions and examines the critical role oceans play in influencing daily, long term and abnormal weather events... including the phenomenon known as El Niño. 13:43

### **5 ENGINEERING: TINY NANO WORLD**

For centuries, scientists and engineers have been making things bigger and better. Now some scientists are trying to make things smaller and better in hopes of solving some of the world's biggest problems in fields like medicine, environmental pollution, and information technology. Exploring the growing fields of micro engineering and nanotechnology researchers are moving individual atoms and molecules to create new materials with presently unimagined practical uses. 16:13

### **6 PHYSIOLOGY: MUSCLES AND BONES**

By studying how our bones and muscles interact to create motion, engineers are improving robots' range of motion, developing more lifelike artificial limbs, creating more lifelike animation, and designing a new level of computer sports games. This edition looks at how our bones and muscles work together, and how the use of special cameras and computers is increasing our ability to utilize this information. 13:29

### **7/8 BIOLOGY: CLOSE-UP LOOK AT SPIDERS AND INSECTS**

Although we share our world with numerous insects and spiders, we probably don't spend much time thinking about the common everyday activities of these fascinating creatures. They must spend their time constructing houses, building protective covers for their eggs, recycling waste and even grooming themselves. In this double issue of SCIENCE SCREEN REPORT, find out how resourceful and clever these tiny critters can be as they live and work in cooperative societies. 24:11