LETTERS

Canadian Saccharin Study: D. L. Arnold et al.; Drinking Water: Sources and Treatment: D. A. Oken; D. J. Baumgartner; Energy and Inspiration: J. H. Gibbons; L. S. Hyman

EDITORIAL

Last Resorts

ARTICLES


Biological Nitrogen Fixation for Food and Fiber Production: H. J. Evans and L. E. Barber

An Economic Appraisal of President Carter's Energy Program: W. J. Mead

NEWS AND COMMENT

U.S. Foreign Medical Students: After the "Guadalajara Clause"

Gene Splicing: Senate Bill Draws Charges of Lysenkoism

Soviets Turn Deaf Ear to Pleas for Levich

Engineer's Memo Stirs Doubts on Clinch River Breeder

RESEARCH NEWS

Solar Thermal Electricity: Power Tower Dominates Research

Electron Probe Microanalysis: New Uses in Physiology

BOOK REVIEWS

Where Hunters Gathered, reviewed by G. P. Rightmire; The Stone Circles of the British Isles, B. Wailes; Theory of Turbulent Plasma, J. E. Walsh; Tree Rings and Climate, T. Webb III; Books Received and Book Order Service

REPORTS

Mining the Apollo and Amor Asteroids: B. O'Leary

Antibody-Induced Antigen Redistribution and Shedding from Human Breast Cancer Cells: R. E. Nordquist, J. H. Anglin, M. P. Lerner

Impaired Regulation of Alveolar Ventilation and the Sudden Infant Death Syndrome: D. C. Shannon and D. Kelly
Goblet Cells in Embryonic Intestine: Accelerated Differentiation in Culture: 
B. L. Black and F. Moog ................................................................. 368
Stimulation by Immune Complexes of Mucus Release from Goblet Cells of the Rat Small Intestine: W. A. Walker, M. Wu, K. J. Bloch ........................ 370
Circulation of H+ and K+ Across the Plasma Membrane Is Not Obligatory for Bacterial Growth: F. M. Harold and J. Van Brunt ............................... 372
Formation of a Serine Enzyme in the Presence of Bovine Factor VIII (Antihemophilic Factor) and Thrombin: G. A. Vehar and E. W. Davie ............ 374
Antigenic Shift of Visna Virus in Persistently Infected Sheep: O. Narayanan, D. E. Griffin, J. Chase .............................................................. 376
New Genetic Marker in Human Parotid Saliva (Pm): S. Ikemoto et al. ................. 378
In vitro Growth of Mycobacterium lepraemurium, an Obligate Intracellular Microbe: A. M. Dhople and J. H. Hanks ................................................. 379
Stimulation of in vitro Translation of Messenger RNA by Actinomycin D and Cordycepin: L. Leinwand and F. H. Ruddle ........................................ 381
An Effective Immunization of Experimental Monkeys Against a Human Malaria Parasite, Plasmodium falciparum: W. A. Siddiqui .................................. 388
North American Egg Parasite Successfully Controls a Different Host Genus in South America: A. T. Drooz et al....................................................... 390
Adipose Tissue Regeneration Following Lipectomy: I. M. Faust, P. R. Johnson, J. Hirsch ................................................................. 391
Surgical Removal of Adipose Tissue Alters Feeding Behavior and the Development of Obesity in Rats: I. M. Faust, P. R. Johnson, J. Hirsch ............ 393
A Critical Period for Acoustic Trauma in the Hamster and Its Relation to Cochlear Development: G. R. Bock and J. C. Saunders ......................... 396
Fright Posture of the Plesiopid Fish Callolepissis altivensis: An Example of Batesian Mimicry: J. E. McCosker .............................................. 400
The Development of Language-Like Communication Without a Language Model: S. Goldin-Meadow and H. Feldman ........................................ 401
Relative Fecundity and Parental Effort in Communally Nesting Anis, Crotaphaga sulcirostris: S. L. Vehrencamp ........................................... 403

COVER
When frightened, the plesiopid fish Callolepissis altivensis adopts a posture and appearance which mimics the head of Gymnothorax meleagris, a noxious moray eel. The plesiopid is about 15 centimeters in length, whereas the moray eel is nearly a meter in length. See page 400 [T. McHugh/Photo Researchers, Steinhart Aquarium, San Francisco, California]
Last Resorts

In the 1976 presidential race, Governor Carter reportedly took the position that in solving our energy problems he would rate nuclear energy as a last resort. Some weeks ago, when the Carter Administration was found to be cutting red tape to speed the licensing of nuclear power plants, one of his retinue explained the apparent change of heart by saying, "Now we are down to last resorts."

Political rhetoric and rationalizations aside, this startling response gives us plenty to think about. It raises the question of how ready we are, as a people, to take the medicine that is implicit in a "last resorts" political economy. Perhaps it will not come to that, but it very well may.

Again and again, we look at the disarray in our national energy policies and at the absence of a national will to face the bleak facts. What is missing is the kind of resolution and action which marked the era of wartime mobilization, when private preferences were overridden by the common emergency. Obviously, it is futile to wish for a return of that sort of unity while we can indulge ourselves in rising imports of energy supplies and in the consolidations of long-term research and development, which may help by the end of the century. The case could be quite different if the situation falls apart in five years or even ten. Perhaps an awakening to the meaning of a "last resorts" society can get us moving in the near term.

We have grown accustomed to having things turn out right, in general, and we expect it as a matter of course. To be sure, things have not gone exactly right for some groups in our society, and there is still that bill to be paid. But on the whole, our situation compares graphically with that of most of the rest of the world. In this country, especially, affluence and consumer satisfaction have brought living standards and expectations to a state for which history offers no parallel.

What can happen to the emotional and social stability of a very rich, if not spoiled, society when it is confronted suddenly with an economy of last resorts? What can become of the decency that underlies behavior in a fortunate and civilized democracy? One thinks of Western societies with which we share historical and institutional beginnings, and whose material fortunes lately have gone sour. They are already close to their last resorts, yet they seem to have come to terms with misfortune. The difference, possibly, is that these societies have 2000 years or more of cultural development behind them and are able to draw upon the perspectives and resilience that are the fruits of their embattled pasts. It is a different case with the American experience, short and one-sided as it has been.

So the question remains troubling. Is our national character prepared for a reversal of our fortunes and our optimistic expectations if events transform the good society to a condition of last resorts? Will we take the same generous view of human and economic rights, and of our relations with other peoples and races, when there is not enough to go around—much less enough to assure us the lion's share?

We are taking a lot for granted. We do not seem to believe that the American experience, as we know it, can be altered drastically and unpleasantly. We seem to think that our luck will somehow hold out, and that a worst-case future cannot materialize. We refuse to examine the social and human implications of last resorts.

That is why the present condition of policy-making in energy is so alarming, and why it may presage other policy dilemmas which will arise as global issues sharpen in the next decade. A nation reduced to last resorts is one in trouble. — WILLIAM D. CAREY