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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Flowers and human ecology

HUGH ILTIS

A love of diversity

Why do I get an irrepressible urge to defend what I love, the beauty and diversity of nature, and, especially the disarming loveliness of its flowers?

One of my earliest recollections is joyfully picking huge and wildly unorganised bouquets of flowers on a Moravian mountain meadow, scabiosas, bluebells and daisies, and then lying on my back in a 'nest' surrounded by tall, tall grass watching the bees and the clouds. Ever since then, I have been an addicted botanist, 'half-plant', as an old friend of mine used to describe me.

My family was always interested in natural history and that tradition gave me much botanical stimulation and often a rather pointed direction to become a botanist (sometimes whether I liked it or not!). Besides being a professional botanist, and an advocate of adult education, my father was also a *preservationist* already in the 1920s; in a simplistic way, he tried to preserve an acre here and there for its rare flora. Way ahead of his time, he was singularly unsuccessful. Then hardly anybody thought preservation worth while, not even the Socialists, among whose ranks he was active, for the archaic creed that the 'people's' needs must always come first, no matter what, was then as now an often ill-applied battle cry against injustice.

In any case, by the time I went to the University of Tennessee in Knoxville I was well prepared to appreciate Professor Jack Sharp, a former student of the still active environmental pioneer Paul Sears. In 1945, Sharp botanically explored the Mexican Sierra Madre and returned with grim tales of horrendous erosion, increasing overpopulation, and outright destruction of forests. Despairing, but never silent, he kept hammering at the issues, at the blind insanity of both hungry and greedy men in a world spinning out of control.

ILTIS
for BioScience

Dear George Please red pencil
comment, curse, stomp on
it etc. and return soon. Have
bad cold - don't feel like writing
Love Huf.

AND

BIOLOGICAL DIVERSITY, THE SOCIAL RESPONSIBILITY

OF THE SYSTEMATIST BIOLOGIST¹

Hugh H. Iltis²

Correct! - but
then occasionally
you should mention
animals when you do
mention only
flowers

death

Behind the elegant skyscraper of Ballantine Hall on the Indiana
University Campus is a small and ancient graveyard, a shrine to the
pioneers: a dozen old grave stones, Kentucky Blue Grass, plastic
flowers, -- and not a native plant in sight. I sat in it for a while
this noon, preparing this talk, wondering what to say to my colleagues
about the environmental crisis - to be angry or to praise, to plead
or to cry, and ended up reading gravestones. One in particular caught
my eye, that of one Ethel Erwin, born in 1754, died in 1844. I, as you,
can't but identify with this old woman, and the kind of world she saw,
the kind of life she lived. The 216 years since her birth, even the 90
years of her life represent, in the multitude of ecological changes, many
millenia; for in that short time more drastic perturbations occurred in
the biosphere of America than in any equivalent time before. ~~in the~~ How
Indiana, how hard it must have been, yet how magnificent! For us field
biologists but to be able to dream ourselves back to 1754 for just one
day, and see the vast wilderness, diverse and unpolluted, the forests

¹Presented at the symposium, "The role of the Systematist in the Population and Environmental Crisis", A.I.B.S. meeting, August 22, 1970, Indiana University, Bloomington, Indiana.

²Department of Botany, University of Wisconsin, Madison, Wisconsin 53706.

CORNFIELDS and cows inherited the tamed earth, the curse of concrete spread upon a de-natured land, and woe became the soul of forsaken man.

This is a world no reader of *FIELD & STREAM* would wish to live in! Yet in *less* than seventy five years if current technology, production-orientated economics, and exploding populations continue, one can safely predict utter destruction of wild

Man's Forgotten Necessity... Eco-Variety

By HUGH H. ILTIS



Dr. Iltis, born in Czechoslovakia, holds degrees from the University of Tennessee and Washington University, St. Louis. He is now Professor of Botany and Director of the Herbarium at the University of Wisconsin. He has made extensive explorations in Latin America; his scientific interests center on taxonomy and biogeography, and, as the reader can tell, on biotic diversity.

animal and plant life from Alaska to the Amazon, from Africa to Australia, a simplification of biotic communities serving but one end—the feeding and housing of the billions of Man.

To any man whose heart belongs to the outdoors, the main lesson of the 20th century should be clear: the earth is well on the road to becoming a crowded cesspool, an ultracivilized wasteland with thousands of factories for wingless, featherless chickens and mutated blobs of “cow” perpetually milked, with synthetic bacon for breakfast and algae steak for lunch, with controlled climates without season, a world of plastic flowers, endless television and frantic tedium, an inhuman inferno, a “Human Zoo.”

Though you hunters, who read this, can still dream today about stalking bear, mountain lion, tiger, or rhinoceros, these and a thousand others are considered by some to be endangered species. In seventy five years, most mammals, birds, reptiles, even fish, clams, and insects, might well be stuffed curiosities in museums or pretty pictures in books, as irreversibly extinct as the magnificent Dodo.

(Turn back to page 44)

FIRST NATIONAL CONGRESS ON OPTIMUM POPULATION AND ENVIRONMENT



CHICAGO/JUNE 7-11, 1970

CORN AND COWS ARE NOT ENOUGH! The Uses of Diversity

by

Hugh H. Iltis¹

Butterfly and wild flower, mountain lion and caribou, blue whale and pelican, coral reef and prairie land--who shall speak for you? My grandchild may need to know you, to see and smell you, to hear and feel you to be alive, bright and happy!

The prime concern of mankind, from now until the end of time, will be the conservation of the diversity of the natural environment.

¹ Dr. Iltis holds degrees from the University of Tennessee and Washington University, St. Louis, and is now Professor of Botany and Director of the Herbarium at the University of Wisconsin. He has made botanical explorations in Latin America; his scientific interests center on taxonomy and biogeography and man's adaptive needs for natural beauty and diversity. This article is based on an editorial from the 75th Anniversary Issue of "Field and Stream" magazine, June, 1970.

What does Megalopolis
What does jump by analogy?
What does pollution " " " " ?
What does wild nature " " " " ?

Interest in Adaptation

vs. Adjustment?
What does man need?
When is happening in
What is happening in
the world?
What is man to do?
Pollution + City, Living
Extinction

CORN AND COWS ARE NOT ENOUGH! The Uses of Diversity.

by Hugh Iltis

ABSTRACT

The great diversity of biological systems insures, through complex interrelationships of the millions of plant and animal species, a great and flexible stability. One of these species is man. For him, diversity insures a stable, useful, and beautiful environment. Any major destruction of diversity is harmful to man, not only because of the loss of stability threatens his very own, but also because man's innate, ancient evolutionary needs include, in addition to food, shelter and other natural products, the beauty, harmony, and diversity of natural form and natural landscape. To man in the denatured technological city, especially, "natural beauty" in its broadest interpretation is one of the most effective antidotes for his environmental alienation.

Extinction of species occurs today on a catastrophic scale, both as to kinds and numbers. Not only do many people use and misuse too many niches of the natural environment, but the world-wide pollution by chemicals such as DDT by blindly profit-seeking, exploitative societies of corporate states invades and damages living cells on every continent and in every ocean.

The eco-revolution on the horizon must be based on a thorough and basic, ecologically-sound restructuring of society to insure the survival of biotic diversity. Man must be brought into a steady-state harmony with the natural environment. The limitation of population size and the consequent restructuring of economics and priorities is the fundamental prerequisite for a meaningful long-term resolution of the environmental crisis. The ultimate aim for our species must be to find the optimum human environment: a compromise between our cultural accomplishments and our biological needs - a compromise between many of the advantages of technological urban civilization, which have freed man's hands from labor and man's brains for creativity and which we are loath to give up; and the innate and often subtle human needs for the evolutionary theater of nature, the wild environment which produced our bodies and brains over millions of years through natural selection, needs which we cannot ignore except at gravest peril to our health, sanity, and happiness.

option

Unhinge chains

g B Van Sledrecht

BIOLOGICAL DIVERSITY, AND THE SOCIAL RESPONSIBILITY
OF THE SYSTEMATIC BIOLOGIST^{1,2}

Hugh H. Iltis³

Behind the elegant skyscraper of Ballantine Hall on the Indiana University Campus is a small and ancient graveyard, a shrine to the pioneers: a dozen old gravestones, Kentucky bluegrass, plastic flowers, -- and not a native plant in sight. I sat in it for a while this noon, wondering what to say to my colleagues about the environmental crisis - whether to be angry or to praise, to plead or to cry, and ended up reading gravestones. One in particular caught my eye, that of one Ethel Erwin, who was born in 1754, and died in 1844. I, as well as you, can't help but identify with this old woman, the kind of world she saw, the kind of life she lived. The 216 years since her birth, even the 90 years of her life, represent in the multitude of ecological changes many millenia; for in that short time more drastic perturbations occurred in the biosphere of North America than in any equivalent time before. Her Indiana, how hard it must have been, yet how magnificent! For us field biologists but to be able to dream ourselves back to 1754 for just one day - to see the vast Wilderness, diverse and unpolluted, the forests and flowering prairies, the buffalos and passenger pigeons by the million! A hundred, or even sixty years ago, in the days of E. L.

¹Adapted, with slight modifications, from an invitational paper, given at the symposium, "The Role of the Systematist in the Population and Environmental Crisis", organized by John H. Beaman, of Michigan State University, at the A.I.B.S. meetings, Indiana University, Bloomington, Indiana, August 26, 1970.

²This paper was submitted to BioScience for publication in the fall of 1970, The editor retained it for a year, (sic!) after which it was refused for among other reasons, being "dated".

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