

## THE PROFESSIONAL BIOLOGIST'S ROLE IN CONSERVATION CONFLICT

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Probably never before in the history of man has a nation been so preoccupied with problems of environmental quality or sought so diligently their solutions than the United States in the late 1960's.

And, perhaps one of the focal points in this nation's conservation movement is right here in California. A recent study revealed that there exist in Northern California alone some 120 organizations---professional and lay---established to deal with matters involving our environment.

This study indicated that there may be as many as one million Californians who are dues-paying, card-carrying members of one or more of the thousands of local chapters or affiliates of these groups.

There should be little trouble in anyone's mind over whether anyone really "gives a damn" about our environment. There are plenty who do. Furthermore, their ranks are growing.

And, this is good. Fortunate, indeed, it is for not only those of us living here today . . . but, for our children and the generations of the future, beyond.

But, this vast, dynamic political force is for the most part in turmoil. The decision-making process, unfortunately, is long on rhetoric and short on facts. There are those, recognizing the potential of this political force, who are struggling to secure a base for political power with little genuine understanding or concern for securing solutions....only power.

The time is long past when this State and nation can further endure the heavy-handed influence on public policy on critical matters of environment and the husbandry of natural resources by strange and sometimes bizarre noises of small bands of conservation dilettantes.

The issues of land use, water and air quality are too crucial and the stakes are too high to give credit to rabble-rousing over issues of secondary and more often remote importance which serve only to distract national attention away from the central question.

The central question is: "How can we continue to meet the demands of people for goods and services, for basic food and fibre without irrevocably destroying the resources and very environment upon which man must depend?"

This question cannot be left to those who would treat it sporadically and only in its most superficial aspects. The question is not one for the amateur. It calls for the highest degree of professional artistry. It demands an understanding of the facts of nature. It requires the correlation of those facts into a web of knowledge---both physical and social---that will permit us to weave a fabric of public policy which will endure for the centuries ahead.

What are some of the crucial areas of our central question which beckon the professional biologist and beg his attention?

Most certainly the question of the very size of our life supporting system must be satisfactorily understood. This is essential in order to deal realistically with questions involving population. The question is essential to understanding the relationship between a species and its range.

Unfortunately, however, when man is regarded as a species, the issue becomes warped through fixed notions about the limits of his range. That there obviously must be a limit goes without question. But there is little evidence of any agreement on the question in the collective wisdom of professional biology.

Some have suggested, and with apparent logic, that we cannot wait until the biological "i's" have been dotted and "t's" crossed before taking steps to form a public policy on the matter of population size. If we do, this argument goes, we are begging for nature itself to take command with the same cruelty and decisiveness we observe when a herd of deer overgrazes its range.

Too often, proponents with fixed and preconceived notions on population control strive to conceal their real objectives by attacking the means of producing goods and services and food and fibre in order to achieve their ends. This, I believe, is a disservice to their valid fears and creates an atmosphere of both political and economic dangers which could destroy needed public concern over the issues involved.

There is a need for honest and forthright exploration into all of the social

and physical aspects of this frighteningly complex question. There is a need for extensive public discussion of all ramifications, based upon fact and not folk lore. But efforts to bring about a de facto population control policy by inhibiting public works deemed necessary to serve immediate population problems will fail and fail disastrously by devaluating public interest in the issue.

The problems of providing food and fiber and goods and services for people are also related to providing space for our population.

We have long ago accepted as truth the idea that among the essential services man requires is some open space where the individual can escape for at least short periods of time from the crush of his neighbors. And, of course, as populations grow they must occupy more space.

This dilemma can only be met by compacting more and more people into given spaces, or by spreading more and more people over greater spaces. And, as one looks around California today, it would appear as though we are going in both directions.

However, the trend appears to favor the concentration of population in huge urban centers, which, in turn, concentrates the major environmental problems in those spaces. And, these are familiar problems of land use and water and air quality.

It would appear that specialists in the wildlife field have a great opportunity, perhaps a responsibility, to elaborate upon and use their specialized knowledge of habitat requirements and variables of a wide range of common species which shares man's urban habitat. The response of these species to this ever-changing physical environment may serve as a most reliable index to just how far man can go in exploiting his urban habitat.

This is certainly not a new concept. It is much like the idea of the miners who took a canary into the coal mines to warn them of impending danger.

The field mouse, a host of bird life, a variety of reptiles and fishes which share man's urban environment likely require a wide range of correlated habitat essentials, the compromise of which could provide man with an early warning system that will tell him he has approached the threshold of safety.

We need more biological professionalism in formulating public policy on questions of environment to balance the emotional yearning of some for a return to an earlier age when life was not so complicated.

While government has a basic responsibility to provide these professional monitors---and equally important---the funds for essential on-going research of these fields, the responsibility is not government's alone.

Industry, whose impact on both the urban and rural environment has equal responsibility to determine in complete detail how its operations effect the environment. This knowledge must not be simply confined to a plant operation, because more often the impact of the use of its goods and services has on the environment is more important.

The issues are too grave and the stakes are too high for this nation or our state---either in the public or private sectors---to fail to determine and struggle to understand all of the ramifications of people-kind of activities involving our environment.

In the process of determining and understanding, the biologist plays a central role.

The youth of today use the term "relevance". And, indeed, this is the "Age of Relevance". It is especially true of the biologist. And, the demand for his professional wisdom is matched only by a most urgent need for the highest order of scientific professionalism.

To the extent humanly possible, the biologist's scientific deportment must not give way to flirtations with those espousing theories and notions that require the juxtaposition of facts to accommodate pre-determined conclusions.

The scientist today must tell it like it is...and keep his cool in the process.