

OBITUARY AND COMMENTS . . .

Dr. Wayne I. Jensen

Dr. Wayne I. Jensen died of a heart attack on 16 November 1985, in Brigham City, Utah. He was born in Taylor, Nebraska, 24 March 1914. He will be missed deeply by all those who had the good fortune to know him. A meticulous scientist, scholar of the highest degree, a humble, warm, and giving person, Dr. Jensen was always willing to share his knowledge with others. His marvelous sense of humor never faded no matter what the level of adversity and he pursued science with a tenacity and enthusiasm that stimulated all persons fortunate enough to work with him. In addition to his immediate family, Wayne is survived by those of us who knew him as a colleague and a friend and considered him as "family." He was truly a professional in every sense of the word, an outstanding individual, and a credit to mankind.

Dr. Jensen was internationally recognized for his knowledge of avian botulism, a subject to which he devoted 30 years of his life. He received a bachelor's degree from the University of Nebraska and then attended Cornell University, from which he obtained his D.V.M. and a master's degree. He became a research associate at John Hopkins University following post-graduate study there.

His career with the U.S. Fish and Wildlife Service began in 1955 as a bacteriologist at the Bear River Research Station at Brigham City, Utah. In 1963 he was promoted to Chief, Section of Wildlife Disease Research, Denver Wildlife Research Center, and in 1970 to Microbiologist-in-Charge of the Bear River Station. After retiring in 1977 he continued his research as a National Wildlife Health Laboratory volunteer.

A long-time member of the Wildlife



Disease Association, he was also a member of the American Veterinary Medical Association, the American Society of Microbiologists, and the American Association for the Advancement of Science, and a charter diplomate of the American College of Veterinary Microbiologists. He was a member of the Interagency Botulism Research Coordinating Committee; belonged to Sigma Xi, Phi Kappa Phi, and Phi Zeta; and appeared in "Who's Who in America" and "American Men of Science."

On his retirement from the Fish and Wildlife Service he was awarded the U.S. Department of the Interior's Meritorious Service Medal. Dr. Jensen was also a recipient of the Wildlife Disease Association's Emeritus Award (1984).

His contributions to wildlife disease investigations will endure for many years. The following dedication appearing in a recent publication (Friend et al., 1985, *Avian Botulism*, U.S. Government Printing Office #579-039, Washington, D.C., 17 pp.) is repeated here to express our warm feelings for Dr. Jensen and his work and the great loss we feel with his passing.

Wildlife disease research in what is now the U.S. Fish and Wildlife Service originated in the early 1900's with investigations within what was then the Bureau of Biological Survey. Losses of millions of birds to an unknown malady later determined to be avian botulism, stimulated the beginning of concentrated scientific research involving disease problems in migratory birds.

Much of what is currently known about this disease in migratory birds resulted from research conducted at the Fish and Wildlife Service's Bear River Research Station in Brigham City, Utah. These research efforts span 30 years of time, from the early 1940's to the mid-1970's. For approximately 25 years of that time, Dr. Wayne Jensen, Microbiologist-in-Charge of that station, dedicated his efforts toward developing an understanding of avian botulism that could eventually lead to prevention and control of this disease.

We dedicate this publication to Dr. Jensen in recognition of his personal dedication, professionalism, high scientific standards, and personal sacrifices in carrying out his research efforts. He has inspired our own scientific development and investigative efforts and is truly an outstanding individual.

The scientific literature reflects some of Dr. Jensen's contributions to science, but cannot show how much he enriched the lives of his friends and colleagues. To share some of his wit and wisdom with you, I am repeating the following three unpublished excerpts from his writings. I feel that he would have approved.

During recovery from a coronary Dr. Jensen wrote,

... I am tubed and wired in a manner, I should think, comparable to a new Mattel toy designed for the Christmas trade. Ten-gauge needles (an eyeball estimate), with clear plastic caudal appendages, penetrate 10 cm (again eyeballed) into the veins on the back of each of my hands. Since nothing has been injected into (or withdrawn from) either in four days, I suspect their function is somewhat akin to that of the vermiform appendix.

Three plastic cups glued to my brawny chest maintain electronic communication with two monitors—one in the nurses' chambers next door and a second positioned about a meter above and a half-meter anterior to my pil-

lowed head, so that, unless my eyeballs are capable of at least 180 degrees upward flip, I am unaware of the drama transpiring in undulating green lines darting across a small screen.

This is as it should be. The layman's eyes should not be upset by the unruly squiggle that occasionally interrupts the predictable Rolling Stones' rhythm of his heart. A bizarre QRS associated with a retrograde P wave may worry the cardiologist, but the patient should be sublimely unaware.

I have had a distinct advantage, however, over neighbors occupying the cubicles adjoining mine in the Coronary Care Unit of the second floor of St. Benedict's Ivory Tower. Whether by reason of an architectural error or a housekeeping fault, the unceasingly wriggling face of my monitor is reflected in minute detail in the gray-black, bulging, nineteen-inch (diagonal) Sylvanian orb that stares at me incessantly from across the room. Everything is in reverse, of course (my heart rate, thank God, is 81 not 18).

Did you ever stop to contemplate that, if *your* heart beats 81 times a minute, you are entitled to only about three billion of them in your statistically predictable three score and ten years? Did you ever watch them flit across a screen and become alarmed at how rapidly they were hacking away at the remains of your three billion? I did, and it occurred to me that there must be some way to slow down this passage of time. Standing up, I finally came directly face to face with the dialed, buttoned red-lighted box with the jumping green lines. Remembering that the activity of most mechanical units is decreased by counterclockwise turns of the controlling devices, I gave an important-looking button a tentative leftward turn. Before I could remove my fingers, four nurses, two residents, and a cleaning lady rushed in the door armed with syringes, vials, respirators, and a wet mop. Asked what I was up to, I lamely explained that I was merely trying to get a cup of black coffee without sugar, but apparently the machine was out of order. . . .

The above passages were from a contribution to the National Wildlife Health Laboratory internal monthly report titled, "Meditations of a Microbiologist Held in Durance Vile." In the following contribution, the subject was endangered species.

How much is a lousewort?

Or, more to the point of this month's irrational commentary, how much is a lousewort? Around \$6.5 million each, if it happens to be one of the few threatening to block construction of the \$1.3 billion Dickey-Lincoln hydroelectric dam in northeastern U.S. As everyone who reads a newspaper knows, the "furbish lousewort," once thought to be extinct has been found—about 200 strong—along the St. John River, in an area that would be inundated by the proposed D-L dam. And, claim the environmentalists, St. John's banks might never be refurbished, for these few may be the last of their kind. Thus, the pain in Maine comes plainly from this claim.

How does one—how *should* one—react to the demise of a species? The many dinosaurs came and went before my time, and so their departure left me few emotional scars. Since the passenger pigeon's passing and my advent were almost coincidental, I can recall no reaction more traumatic than a sympathetic burp or two. Perhaps these experiences left me calloused, because I must confess a shameless apathy with respect to the possible fate of the furbish lousewort. In my mind, every living creature should have a job to do—either utilitarian or aesthetic—to justify the space it occupies in the universe. Either it should digest unwanted wastes and tissues to prevent their piling up underfoot; or it should serve as food for the other species; or it should produce energy beyond its own requirements; or it should synthesize products useful to other species, perhaps living in peaceful symbiosis with them. Or, it could just sit there looking pretty and still justify its existence—to me at least.

Although I have never known one personally, I am told that the furbish lousewort has no remarkable talent for any of the above activities; unless, of course, its semi-parasitism gives aid and comfort to its host. One biologist was quoted as saying it is senseless to kill plants that may have social or economic value in the future. "One of them may turn out to be an anti-cancer drug," he added. "Or it might be a birth control agent or a natural herbicide." I can't argue with that. But if this particular lousewort has any such potential, it had better shift gears, because 200 plants working 24-h days and 7-day weeks are not going to cure many cancers or prevent many conceptions or harass many weeds. On the other hand, if it can be induced, with man's help, to propagate more prolifically, the whole

problem is solved. Simply transplant it from St. John's bank to another suitable habitat and get it moving.

It isn't true, as it may seem, that I don't care a fig for the figworts, and this particularly lonely one can still find redemption in my eyes. If it does nothing more than prevent construction of a dam that should never have been proposed in the first place (I have no knowledge of the pros and cons), it will have found its niche and filled it admirably. And I will be the first to shout, "Long live Miz Furbish's *Pedicularis!*"

By a rather devious route, I have been leading up to a comment on Dr. McDonald's contribution to *Open Forum* in March. Under the heading, "Let's have a little consideration for the worms," he poses the perfectly legitimate question, "While all the fuss is being made about the endangered species, how about the endangered species of parasites?" Although tongue-in-cheeking us just a little, he made a point worthy of that consideration.

Even if it were possible, would it be desirable to perpetuate for eternity every species created since the beginning of time? If so, and every host is worthy of salvation, then why shouldn't the worms they carry be equally worthy? And to carry the argument to an illogical conclusion, why then not their bacteria and viruses? Should we, for example, rush into Somalia, where the smallpox virus is on the verge of extinction, shouting, "Drop that vaccine vial, fella! We gotta leave a little suitable habitat for an endangered species?"

If it is not in the cards that every species has the right to live and prosper for all time, who besides God has the right and the wisdom to say which should stay and which should go. One man's orchid is another man's lousewort. If He ever forms a committee to decide, I will surely not be asked to serve, because I am singularly lacking in compassion. If it were in my power, for example, to snap my fingers and wipe out to the last seed the yellow host (*Isatis tinctoria*) that creeps over every unattended square foot of our local landscape like an animated carpet, I would do so without hesitation and without tears. If I could in some way induce every dandelion on the face of the earth to lock roots in mortal combat with the nearest clump of crabgrass, I would do so today without contrition. And when it was over, I would look out across

the chlorophyll bespotted earth and say, "Good riddance!"

And so, you see, I am not a true environmentalist. I thought I should confess and ask for absolution.

The third contribution involves response to an article involving cheating in science.

We're not guilty, so it must be you.

A recent article in the Salt Lake Tribune brought to light a truly appalling situation—if it is indeed true. Under a November 26, 1976 dateline, a Reuters News Agency by-line, and a "Science Reports May be Faked" headline, it summarized the results of a survey conducted by Dr. Ian St. James-Roberts and published in the *New Scientist*.

The report suggested that perhaps as many as 90% of all scientists may be fudging—a little or a lot—to confer upon their experiments greater-than-deserved significance. "Some of those who replied [to his questionnaire]," he said, "included self-incriminating material", implying that others who replied were not guilty themselves (or were not willing to admit their guilt) but knew of scientists who were. St. James-Roberts admitted the results of the survey were biased—one reason being that most of the persons polled were blowing the whistle on their colleagues, rather than on themselves (in which case they may well have been even more biased). At any rate, it's too much. To be fair, let's cut the figure in half—forty-five percent. That's still a whale of a lot of flimflammy, particularly when university scientists, usually considered to be paragons of virtue—seekers of truth—were pointed out as the worst offenders.

In most cases, probably no real harm was done. Whether the pseudopodia of the greater anomalous wizwab, for example are reported as shiny bald or covered with butch-cut trichomes should result in no serious mortality—or even pain except, perhaps, to the wizwab itself. When drug companies subtly urge investigators to cheat in a direction favoring their own products, however, as the article suggests, they are inviting another thalidomide tragedy.

Cheating among scientists is not a new social disease, of course; it is one that has existed for ages. We don't even know whether it is

more prevalent now than in years past; we don't even talk about it, in fact, unless we are caught. We predict that while it will be endemic in the scientific community forever, it will never become epidemic.

One wonders, however, how many of the "facts" he has accumulated over the years are actually fiction. Without meaning to view lightly a possibly serious problem, we were inspired to put down on paper our concerns in the form of a bit of doggerel. Lacking skills in both rhyming and meter, we resorted to an artifice—deliberate misspellings—for the sake of euphony, the Nashian fashion, so to speak (the poor man's Ogden Nash, of course).

Here it is:

THE TRUTH AIN'T NECESSARILY SO

Is the earth a real sphere as we commonly hear?

Was Columbus just telling us that?

Was he out for more offers from Isabel's coffers,

When the truth is the whole thing is flat?

Was Pythagoras' therium conceived in delirium?

"Oh, Zeus, I must publish or perish!"

Was he yet unprepared—his hypotenuse squared,

But his legs still roundish and hairish?

Is the water we drink at our sparkling sink

Really made up of H₂ and O?

Could it be something deadly that's killing us steadily

Before we are ready to go?

The black widow spider has eight legs beside 'er.

The louse only six, says my book.

Skintickulus pediculus? I find that ridiculous!

Has anyone bothered to look?

Is the moon really there with its heavenly glare

Making lovers conform to a fashion?

I've almost concluded we're being deluded—

It's a product of hormones and passion.

It is true that the pill makes it likely that Jill

Can submit to her Jack with impunity?

If they frolic too long, mayn't something go wrong?

Could she possibly lose her immunity?

Two and two equals four? It's a fact I deplore

That my doubts make me jumpy and scared.

"Black is black, white is white" on the surface seems right;

But—does E=mc²?

Seriously, the news article did not indicate the geographical scope of St. James-Roberts' survey; but I suspect it presents a grossly distorted view of scientists in general. I have known many over the years, mostly Americans, and I prefer to believe that fewer than one percent of them could be guilty of tampering with research results.

Farewell, Wayne—we'll miss you.

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