Professor asserts there's life on other planets

By J. DAVID MILLER

"Yes, I believe intelligent life exists on other planets" says Dr. Merril Edwards of the UNB Physics Department.

In a lecture given to the UNB Biology Society last week, Edwards reviewed current theories with respect to life on other plants and the calculation of the probabilities for same.

Edwards stated that "some 40-50 years ago people thought that our solar system was caused by a sun passing by our sun". This resulted in the breakup of material and the creation of the planets. This theory caused the feeling that we were unique. Subsequent to this it has been shown that our solar system couldn't have been created in the above manner.

Edwards explained that for life to exist "you are going to need long chain compounds." Carbon is the optimum element for the production of such compounds, but he said Nitrogen, Phosphorus, and most probably Silicone could be substitutes. Temperature essentially should be in the range of -15 degrees to 95 degrees celsius and pressures should be moderate because reactions are thermodynamically inhibited at temperatures and pressures outside the moderate range. These factors mitigate against a planet with high temperatures and pressures producing intelligent life, he said.

The bulk of the lecture concerned the calculation of the probability of intelligent life existing on other planets. In 1961 a symposium of important scientists developed the equation $N = R\ fp\ Ne\ fl\ fi\ fc\ L$ which describes the probability of discovering intelligent life willing to talk to us.

N = a number of planets which are capable of producing an intelligence and who want to communicate.

Ne = number of planets which can support life

R = rate of production of suns at the time that the sun was produced.

fp = fraction with planets
fi = fraction which produces intelligent life.
fc = fraction which produces intelligent life which wishes to communicate
L = longevity of a technology.

R is about 1/yr., fp is about one-half to one-fifth, Ne is about 2 to 3, fi and fl are both equal to 1 and fc is equal to 0.1 to 0.2.

The latter two are explained by the fact that a "Law of Convergence" can be logically developed which says that "any form of life will ultimately evolve to an intelligent form, or a given number of organisms will develop towards the best utilization of their invironment.

fc is only 0.1 to 0.2 because, says Edward, "when you consider so called intelligent life on earth, man is the only one which wants to communicate". Whales, dolphins, and other animals we suspect to be intelligent really don't seem to want to communicate with "people on another planet."

The last term L, the longevity of a technology, is important because of the distance factor. Our nearest neighbour is about 20 light years away and it takes some 40 years for a round trip message. "The longest technology on earth to date is about 100 years" says Edwards, "We don't seem to be too stable". What with nuclear threats and the population problem, it is difficult to conceive of "us" being around more than a few hundred more years.

When the calculations are done, the numbers come out to only 1 in 3×10^6 suns at present have a stable civilzation wishing to communicate with us. The average distance therefore between starts with such civilizations is about 1,000 light years. Two thousand years for a round trip radio message!

Notices for other speakers to the Biology Society are posted, and they are open to the general public.

Hallowe'en party planned

The Education Society is holding a Hallowe'en costume party on Friday, October 29, from 8:30-12:30 in the Education lounge, Rm 230. All Education Students are welcome. Admission is 50 cents for society members and 75 cents for non-members. Prizes for best costume will be awarded. Lots of games, folk music and dancing.

"Nobody for President" campaigns

SAN FRANCISCO (ZNS-CUP) — The "Nobody for President" campaign announced plans this week for a cross-country tour to raise support for Nobody for president.

At a rally in San Francisco to kick-off the nationwide tour, 300 backers for nobody chanted slogans including "Nobody ended the war". "nobody's lowered taxes," and "Nobody can lead this country."

Wavy Gravy, one of Nobody's long time campaign organizers, told the rally the Nobody should have as much power as the president has.

Magazine editor and columnist Paul Krassner, however, warned that even the Nobody for President campaign could be corrupted. Krassner reminded the crowd that earlier this week the teamster's union, which had endorsed Nixon four years ago, had decided to endorse Nobody.

The campaign tour will include stops in Los Angeles; Albuquerque; Austin; Washington D.C. and New York. Most stops will include a short motorcade with convertible featuring Nobody in the back seat.

Pollution lecture, UNB

Pollution problems as confronted in one of the world's largest cities will be the topic of a public lecture at UNB Fredericton on October 29.

Humberto Bravo, head of the environmental pollution department, Instituto de Geofisica, National University of Mexico in Mexico City, will speak at 3:30 p.m. Friday in Rm D-6, Head Hall.

Dr. Bravo's department has been working closely with the Mexican government in research and operational problem solving in the areas of air pollution, treatment of solid wastes, and water polllution.

He will be discussing both research and policy aspects of these topics, and is expected to go into some detail about his setting up of an automatic system for the monitoring of air pollution.

His visit is sponsored by the U .NB civil engineering department and the Senate visiting lectures committee.