

## Ecological Intelligence: Summary

We are seeking collaboration in the development of Ecological Intelligence (EI) as a means of beneficially controlling and utilizing Artificial Intelligence (AI). We feel that this is necessary because AI only runs on computers which use a real number algebra applied to binary numbers. We already know that this is not even adequate to describe quantum mechanics so why would we believe that it is adequate to describe or emulate human intelligence.

There are many definitions of EI but we propose that it is the way that all biological organisms in Nature make the decisions that control their behavior. This EI is not computational. It does not use real number mathematics and probabilities. Instead it functions by connecting instinct, emotion, and intuition with the personal experiences of organisms to generate an understanding of what they, or we, want to do.

To get a sense of the essence of EI consider four of basic principles by which Nature functions. These include:

First, there is no waste in Nature. Everything is recycled.

Second, Nature is essentially democratic. Organisms make their own decisions.

Third, there is no extreme wealth inequality in Nature. Ecosystems are balanced.

Fourth, all biological organisms use a carbon energy currency;  $C + O_2 \rightarrow CO_2$

These principles can be applied in ecotechnologies in agriculture, aquaculture, and the treatment of wastes and wastewaters. Here they provide design and operational procedures and protocols for real world sustainability. This can then lead to guidance as to how we can use EI to resolve current sociological, political, and environmental problems.