

The following principles on natural systems are important to consider when 'harvesting' natural resources. They are included in the Principle Summary in *Permaculture - A Designers Manual* (Mollison 1988: 34-35). The initial quoted text for each of the six principles is from Birch, and the italic commentary following is by Mollison. NOTE: Louis Charles Birch FAA (1918–2009) was an Australian geneticist specialising in population ecology. As Challis Professor of Biology at Sydney University, he helped lay the foundations for the 'new' science of ecology. (see also mind map 4.)

Birch's Six Principles of Natural Systems:

1. "Nothing in nature grows forever"
(*There is a constant cycle of decay and rebirth*)
2. "Continuation of life depends upon the maintenance of the global bio-geochemical cycles of essential elements, in particular carbon, oxygen, nitrogen, sulphur and phosphorus."
Thus, we need to cycle these and other minor nutrients to stimulate growth, and to keep the atmosphere and waters of earth unpolluted.
3. "The probability of extinction of population or a species is greatest when the density is very high or very low."
Both crowding and too few individuals of a species may result in reaching thresholds of extinction.
4. "The chance that species have to survive and reproduce is dependent primarily upon one or two factors in the complex web of relations of the organism to its environment."
If we can determine what these critical factors are, we can exclude, by design, some limiting factors, eg: frost, and increase others, eg: shelter, nest sites.
5. "Our ability to change the face of the earth increases at a faster rate than our ability to foresee the consequence of such change."
Hence the folly of destroying life systems for short-term profit.
6. "Living organisms are not means but ends. In addition to their instrumental value to humans and other living organisms, they have an intrinsic worth."
This is the life ethic thesis so often missing from otherwise ethical systems.

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Permaculture systems should be constructed and maintained using category 1 to 3 resources. Category 4 resources should be used sparingly and category 5 resources avoided as much as possible. Category 6 resources should be identified and used as a matter of priority.

BIRCH

Set of Ethics on Resource Management



1. RETURN

2. WITHHOLD

Law of Return:

- * Whatever we take, we must return;
- * Nature demands a return for every gift received;
- * The user must pay.

Directive of return:

Every object must responsibly provide for its replacement. Society must, as a *conditions of use*, replace an equal or greater resource than that used.

Six Categories of Resources:

Try to think of at least one resource under each category.

1. Those which increase by modest use.

2. Those unaffected by use.

3. Those which disappear or degrade if not used.

4. Those reduced by use.

5. Those which pollute or destroy other resources if used.

6. Those which pollute or destroy other resources if not used.

EXERCISE

3. MANAGE RESPONSIBLY

Policy of Resource Management:

A responsible human society bans the use of resources which permanently reduce yields of sustainable resources, e.g. pollutants, persistent poisons, radioactives, large areas of concrete and highways, sewers from city to sea.

Growth:

"Like war, growth at any cost is an outmoded and discredited concept. It is our lives which are being laid to waste. What is worse, it is our children's world which is being destroyed. It is therefore our only possible decision to withhold all support for destructive systems, and to cease to invest our lives in our own annihilation". Mollison (1988)

RESOURCE MANAGEMENT ETHICS
Mindmap E3.