

PRACTICAL STEPS

1. Encourage **prayers and liturgies** which include God's earth and people struggling to protect bio-diversity.
2. Manage your **churchyard** to benefit wildlife. Plan a Nature Trail through an old part of your churchyard pointing out different trees, plants, lichens, and stone used in the building and gravestones.
3. Urge central church authorities to **nurture land** under their control in ways which increase its bio-diversity.
4. Contact your local authority for details of their Local Biodiversity Action Plan and help with local conservation.
5. Grow **old and rare fruit varieties** from Brogdale in your garden.
6. **Garden organically**, use peat free compost, dig a pond and leave some wildlife habitats. Remove some slabs or concrete and let life live. Allow plants to produce seed before you rush for the secateurs to tidy up, so the birds can feed on them. Leave some old growth on perennials overwinter to protect the soil surface and the minibeasts below ground, and provide shelter for others on the surface like frogs and hedgehogs.
7. Play **nature games** with the Sunday School.
8. Support local, national and international conservation charities.

ORGANISATIONS AND BOOKS

Biodiversity Action Plan: www.ukbap.org.uk

Brogdale Horticultural Trust, Brogdale Road, Faversham, Kent ME13 8XZ. www.brogdale.org

Church & Conservation Project, Arthur Rank Centre, Stoneleigh, Warwickshire CV8 2LZ. www.arthurrankcentre.org.uk

County Wildlife Trusts, addresses from the Royal Society of Wildlife Trusts, The Kiln, Waterside, Mather Road, Newark NG24 1WT. www.wildlifetrusts.org

English Nature, Northminster House, Peterborough PE1 1UA. www.english-nature.org.uk

Heritage Seed Library, (HDRA), Ryton Organic Gardens, Coventry CV8 3LG.

Kew Gardens Millennium Seed Project, Wakehurst Place, Ardingly, Haywards Heath RH17 6TN. www.rbgkew.org.uk

Plantlife International, 14 Rolleston Street, Salisbury SP1 1DX. www.plantlife.org.uk

RSPB, The Lodge, Sandy, Beds SG19 2DL. www.rspb.org.uk

For conservation and bio-diversity enquiries: WWF, Panda House, Godalming, Surrey GU7 1XR www.wwf-uk.org;

www.conservationfoundation.co.uk;

the UNEP World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge CB3 0DL. www.unep.wcmc.org;

and visit www.iucn.org for details of species at risk of extinction worldwide.

BOOKS

Sean McDonagh, *Death of Life - The Horror of Extinction* Columba Press, 2004.

Chris Baines, *How to Make a Wildlife Garden*, Frances Lincoln, 2000.

Nigel Cooper, *Wildlife in Church and Churchyard*, Church House Publishing, 2001.

Joseph Cornell, *Sharing the Joy of Nature*, Dawn Publications, 1989.

Ghillean Prance, *The Earth Under Threat*, Wild Goose Publications, 1996.

JOIN CHRISTIAN ECOLOGY LINK

Send £18 standard (low income £10), £28 family/corporate or a donation for church membership (recommended amount £25) to CEL FREEPOST, SE 8672, 9 Nuthatch Drive, Earley, Reading RG6 5ZZ. Cheques payable to CEL. For more information contact: CEL, 3 Bond Street, Lancaster LA1 3ER. 01524 33858. Email info@christian-ecology.org.uk

Send for copies of this leaflet to CEL Publications, 40 The Avenue, Roundhay, Leeds LS8 1JG.

Please send a donation to cover cost of printing and postage, or at least an S.A.E.

You are welcome to photocopy it if you acknowledge CEL. Dec. 2004.

CEL Registered Charity No. 328744. (www.christian-ecology.org.uk)


**CHRISTIAN
ECOLOGY LINK**



BIO-DIVERSITY



'Let the heavens rejoice, let the earth be glad;
let the sea resound, and all that is in it.
Let the fields be jubilant, and everything in them.
Then all the trees of the forest will sing for joy' (Ps.96:11-13).

Bio-diversity simply means the variety of life on earth. 'As the psalmists so eloquently sang, God's glory is to be found in the whole of the vast order of the universe and in the miraculous detail of nature in all its forms', (Archbishop George Carey).

The exact number of species of living organisms is unknown — conservative estimates suggest about 12 million. Many will be small and not yet described by specialists, but provide essential food or support for more familiar forms of life. Humans and other animals, plants, fungi and micro-organisms depend on each other.

A United Nations Environmental Programme report in 2004 concluded that over 15,000 species may face extinction within 30 years. One in three amphibians and almost half of all freshwater turtles are threatened, on top of the one in eight birds and one in four mammals. Extinction means the final, irrevocable disappearance of a species from the face of the earth, never to be seen again.

Overleaf are a few examples of bio-diversity loss, some reflections on why this matters to Christians and what each of us can do to help.



Global & national action plans

Along with over 100 other countries the UK signed the Convention on Biological Diversity at the Earth Summit in Rio de Janeiro in 1992. This led to the establishment of the **UK Biodiversity Action Plan (BAP)** which aims to maintain and enhance bio-diversity. The UK BAP set up targets and action plans for the conservation of 391 key species and 45 important habitats as priorities for action and is closely monitoring them.

UK habitat loss in last 50 years

Saving the habitats where plants and animals live in the wild is vitally important, both in the rainforests and in the UK.

Lowland bogs	down 95%
Native pinewoods	down 70%
Chalk downland	down 70%
Lowland wet grassland	down 60%
Lowland heathland	down 40%

Local authorities are setting up Local BAPs to protect what is left of these habitats.

Plants



Without plants life on Earth would cease to exist. The concept of bio-diversity is not just about different species. It also includes variation **within** species. This genetic diversity is what enables a species to survive in face of adversity, such as pests, disease, drought and climate change. When populations of a wild species of plant decline, or crop plants are restricted to a small number of widely grown varieties, those that remain are much more vulnerable to devastation and even extinction, by, for example, climate change or the evolution of a new strain of disease. Kew Gardens' Millennium Seed Bank Project is gathering and storing seeds from plants most at risk across the world.

The varieties of fruit and vegetables grown and sold commercially are very limited. **Regulations restrict the sale of vegetable seeds to a few registered varieties.** The HDRA Heritage Seed Library contains and exchanges UK seeds from 700 unregistered vegetables they are not allowed to sell. National fruit collections keep our genetic heritage safe. Brogdale in Kent grows 2,500 different apple varieties, plus pears, plums and soft fruit. Harlow Carr Gardens in Harrogate preserves the UK rhubarb collection.

Birds



The trees of the Lord are watered abundantly, the cedars of Lebanon which he planted. In them the birds build their nests; the stork has her home in the fir trees' (Ps.104:16-17).

In the last 20 to 30 years the numbers of UK farmland birds have declined by 42% and woodland birds by 15%. Some previously common urban and garden species such as house sparrows and starlings are in serious decline. Others like the magpie, carrion crow and woodpigeon are on the increase.

According to the RSPB the loss of farmland birds was largely caused by:-

- indirect effects of pesticides on the insects eaten by birds
- loss of mixed farms with their range of habitats
- change to planting autumn sown crops instead of spring

There are hopeful signs. Changes in farming practices are already showing encouraging upturns in some birds and the Environmental Stewardship scheme for farmland will help further improvement. Bitterns, corncrakes, stone-curlews and cir buntings were at serious risk of extinction in the UK as recently as the mid-1990s. Thanks to concerted conservation action their numbers are increasing.



Other animals

'The high mountains are for the wild goats; the rocks are a refuge for the badgers' (Ps. 104:18).

Some animal species that have become extinct in the UK since 1900.

Exploding bombardier beetle	1928
Horned dung-beetle	1955
Burbot (a fish)	1972
Ivell's sea-anemone	1983
(now globally extinct)	
Mouse-eared bat	1990
Essex emerald moth	1991

Sea Creatures

Yonder is the sea, great and wide, which teems with things innumerable' (Ps. 104:25).

We know more of the moon than we do of the deep mysterious oceans. Industrial fishing and fish farming are increasing. Fish stocks are plummeting, coral reefs are being destroyed by pollution, dynamite fishing, tourism and souvenir hunters. Non-Government Organizations, and campaigning groups, have battled long and hard to protect large sea mammals.



Why does bio-diversity matter to Christians?

'The earth is the Lord's and everything in it' (Ps. 24:1).

Some would argue that the extinction of a dung beetle is insignificant or that extinctions are all part of God's plan. Psalm 8 describes people as '*rulers over the works of God's hands*'. Everything is '*under their feet*' (v. 6). But in the first and last verses the Psalmist proclaims that the earth is God's. We are accountable to God for how we use other creatures.

John Calvin (d. 1564) wrote in his commentary on Genesis, '**The custody of the garden was given in charge to Adam, to show that we possess the things which God has committed to our hands, on the condition that, being content with the frugal and moderate use of them, we should take care of what shall remain.**'

No species lives in isolation. For example birds depend on a variety of other species to provide their food — from grasshoppers and seeds to fish and rabbits. We need biological resources to feed and clothe us and provide housing, medicines and spiritual nourishment. But according to the Bible all creatures are good in themselves. They are not just for our use. All creation from wild animals and cattle to fruit trees and people praise God by living their natural lives. As Pope John Paul II said, '**Nature should be respected and preserved so that by establishing a healthy proper relationship with it, people can be led to contemplate the mystery of God's greatness and love.**'

Thought

Country churchyards often contain the last 'unimproved' grassland in an area. Some parishoners want to manage part of the churchyard as a meadow, cutting the grass only late in summer so wildflowers can seed, and to encourage Sunday School children to observe wildlife attracted by the long grass and flowers. Others like the churchyard to look tidy with short grass and think children wandering around graves looking for insects and lichens is disrespectful to the dead.

What do **you** think?

