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Scientists begin project to 'barcode' earth's 10m species

By John von Radowitz

SCIENTISTS yesterday embarked on a momentous project to "barcode" every species of life on Earth.

The aim is to have a record of genetic sequences that uniquely identify every one of the estimated 10 million species of plants and animals by 2010.

Many extinct species may also be barcoded using DNA taken from museum collections.

Less than a fifth of the Earth's flora and fauna have been named by scientists.

The task of identifying and describing the vast array of known and unknown species on the planet is a daunting one, but vital to scientific research.

Three new initiatives launched yesterday (wed) mark a first step towards that goal.

Two of the initiatives will aim to gather genetic barcodes of all the world's fish and bird species. The third will develop an open-access archive of DNA sequences from specimens held in major collections around the world.

The overall project is being coordinated by the Consortium for the Barcode of Life (CBOL), which will bring together experts from fields such as taxonomy the classification of living organisms and information management.

Scott Miller, chairman of CBOL, said at a news conference at the Natural History Museum in London: "DNA barcoding will make a huge difference to our knowledge and understanding of the natural world.

The Barcode of Life initiative aims to complement existing taxonomic practice to build on it and expand its power and use," he said.

DNA barcodes will make species recognition in the field much easier, especially where traditional methods are not practical.

They will also give non-specialists an easy way to make identifications and provide access to detailed species information.

In addition, species identification will become more reliable. DNA analysis has already forced experts to re-think classifications of some species previously identified by physical characteristics.

As well as improving understanding of life's evolutionary history, the collected information will help conservation efforts and aid the fight against infectious diseases and pests.