

**Keynote address by IUCN Director General Julia Marton-Lefèvre at the Esri International**

This sample of species indicates how life on Earth is faring, how little is known, and how urgent the need is to know more.

A couple of years ago, a group of prominent scientists, including E.O. Wilson and Simon Stuart who is here with us, designed a concept to make the IUCN Red List representative of all life on Earth.

They called this idea ***The Barometer of Life***.

The idea is to bring together taxonomists, biogeographers, ecologists, conservationists, and amateur naturalists to bridge the gap in our knowledge of global biodiversity.

In practical terms, the Barometer would triple the number of species currently assessed to 160,000, within five years.

Such a barometer would be one of the best investments for the good of humanity.

At the moment, however, the barometer of life is falling rapidly. It shows us that a storm is indeed brewing.

According to the latest update of the IUCN Red List, one in four mammals, one in eight birds, one in three corals and two out of five amphibians are threatened with extinction.

As an aside, one of the species on the Red List that is doing rather well is *Homo sapiens*. We are listed as being of *Least Concern*, with population numbers increasing.

You may justly argue that species extinctions are part of the evolutionary process.

It is so. But what we are witnessing today is species disappearing up to 1,000 times faster than the natural extinction rate calculated from fossil records.

There is a good reason for us to care about wild species going the way of the dodo — or, indeed, of Lonesome George.

These species, together with their genes and ecosystems in which they live, known collectively as “biodiversity”, are the very foundation of our wellbeing and indeed our own survival on this planet.

They are the source of our food, water, fiber, shelter, medicine — the list goes on.

On top of meeting our basic needs, nature is also the source of inspiration; it recharges our batteries and nourishes our soul.

Speaking of nourishment, more than one billion people worldwide rely on fish for their major source of protein; however, one in three fish stocks is currently being overfished.

I don't need to remind you what happened when the once flourishing North Atlantic cod fishery collapsed, and the impact this had on the communities on Canada's eastern seaboard. In Newfoundland alone, over 35,000 people lost their jobs and livelihoods.

Around the world, overfishing costs us an estimated 50 billion US dollars **every year**.

On land, only four crops (wheat, maize, rice and sugar) supply more than half of calories and proteins in the human diet. Imagine what would happen if we were to lose one or more of them?

An historic example well known to you is the Irish Potato Famine which killed over one million people — and resulted in the greatest influx of Irish migrants to the United States.

If we continue losing many of the “wild relatives” of our staple crops as we do today, we lose the genetic diversity to develop new strains of food crops that are more nutritious, more resistant to disease, and more resilient to climate change.

Without such diversity, we would be literally biting the hand that feeds us.

Nature also keeps us healthy. Here in the United States, half of the 100 most-prescribed drugs originate from wild species. One of them is taxol, widely used in cancer treatments.

It comes from a tree called the Himalayan yew, and this tree has just entered the top threat category — *Critically Endangered* — on the IUCN Red List. Imagine how many more possible future cures could disappear before they are even discovered!

Fortunately, not all news from the Red List is bad. Conservation has centuries-old roots and there is increasing evidence that, when we put our mind to it, it works.

One such good news story is a Black-footed Ferret, which was considered to be Extinct in the Wild just 15 years ago. It has now been reintroduced back into the prairies of the western US states and Mexico.

Since the global ban on commercial whaling in 1968, the Humpback Whale has made a remarkable comeback and its population now stands at 60,000 and growing. This recovery also allowed a thriving whale watching industry to develop. Imagine if you could never have the joy of scanning the horizon in the hopes of sighting a whale!

The Southern White Rhino was poached to near extinction. By 1900, no more than 50 survived in a single park in South Africa. Thanks to strict protection measures, 100 years later there were approximately 20,000 animals roaming across southern Africa.

However, even with this success, there's no room for complacency. Today we are witnessing the worst rhino poaching crisis in history, with rhino horn fetching record prices on the black market.

These stories illustrate why we need the Red List in the first place: to understand the challenges; set global conservation priorities; mobilize conservation action; and influence decision-making.

What we need most is to **connect data with action**. Achieving all of this would be impossible without cutting-edge



We must invest in broader and deeper knowledge,

