In this Lecture I shall touch down in many countries, but first I shall talk about the
one I know best—Britain. William the Conqueror made the New Forest of Southern
England his playground. He chose well, knowing nothing about wild-life conservation
and such ecological notions as habitat, community and succession. The Normans and
their ancestors the Vikings were plunderers and destroyers rather than conservers.
Nevertheless, the forests, chases and parks that the Normans reserved in England for
their amusement have stood us in good stead. The New Forest is on poor gravel
overlying impervious clay, a horrible place agriculturally, and I cannot believe that
William ejected many farmers, because the Saxons had a good deal of ecological
sense. Let us be thankful it became a Royal Forest and has remained so till our day,
being now the playground of a lot of people, a truly wonderful place for growing trees
and a considerable haven for a representative sample of England’s wild life. It is a big
enough place to have some ecological power of its own to retain its integrity.

The New Forest is not a British national park, a national nature reserve, or a Forestry
Commission holding as a whole. It is the New Forest and a place of which we should
be proud. Of course, in time of war, busybodies without knowledge chirrup about the
necessity for growing food and the apparently lazy New Forest had to give up some of
its lawns. And they did grow their sugar-beet and what-not eventually.

The Commoners had looked after themselves by stipulating that at the end of the war
the land should be laid down to grass again and the fences removed. They also got an
agreement with the Forestry Commission to keep the commons clear of tree growth in
return for other areas devoted to trees. Well, after the war the commons were put
down to good grass with the help of phosphate and potash dressings. Ponies, cattle
and sheep liked this: so much so that they concentrated on the commons that had been
ploughed and re-seeded, not doing the grass much good, nor themselves finally,
because such concentration soon meant heavy infestations of parasitic worms.
Meanwhile those poorer commons left unploughed and almost deserted by the
opportunist stock began to grow a good stand of regenerating pine trees, a situation
the forester likes to see, but this conflicted with the Commission’s agreement to keep
these commons in grass. This foolish story of imagined patriotic expedience is a good
example of the results of a lack of any prior ecological study of land use and of a
long-range plan. The Verderers of the New Forest had learned their empirical ecology
the hard way, and their good sense was too easily interpreted as reaction and an
inability to understand the national urgency.

That was 20 years ago and the New Forest has in some measure settled down again.
What must now be the principal worry of the Verderers is the vastly increased
visitation by people from elsewhere, many seeking that which the New Forest gives
so generously, some of them imagining that when you get out of your car you make
whoopee, and some quiet, decent but Ignorant folk who can soon create a lot of
damage. The Verderers, and foresters of the Forestry Commission, are patient men:
they manage, advise and clear up. They do a good job of educating the public and co-
operate with the Nature Conservancy, which in Great Britain is the governmental
body charged with tasks of nature conservation and research.

The Art of Conservation
That is my impression of one splendid piece of England, but, all in all, England is
losing out on her countryside. The Town and Country Planning Act of 1947, at first
an excellent brake, has worn thin but still does good. When it comes to export or die,
another facet of the population problem, economic growth overrides everything. John
Barr tells us we’re adding ten acres a day of dereliction to the quarter of a million we
have already. Housing and factory development need land. New and widened roads
plough through the countryside. It has been firmly instilled into us that we cannot
stand in the way of progress, so-called. You can’t anyway, because we live in our era,
but a large body of private and professional people in this country do influence the
decisions of governments and developers and help to save a little more of the heritage
of England for a longer time, or so we hope, despite the awful future of the world
which I have been dolefully retailing.

It is so easy to descend into a series of ineffectual flapping movements: I’ve already
said I intend to continue motoring at over 40 miles an hour, and because I live deep in
the country our sole household help is electricity. So I am interested in better roads
and new power stations and I make my contribution to pollution in the countryside.
Those with whom I associate don’t wish to put back the clock, nor do we wish to
forgo the benefits of technology so long as the factories and power stations are 50
miles to leeward of where we live. That again would be the siege mentality. The art of
conservation stems from the science of ecology, a delight in knowing how nature
works and a love of beauty which may or may not be conscious. Every acre, not only
of Britain but of the globe, demands thought before its biological and visual relations
are altered.

Conservation, in the sense in which the word is generally used now, arose in America
in Theodore Roosevelt’s Presidency. A large part of the land had taken an awful
bashing from the exploiters: wild life was getting scarce and timber was being used
almost for the sake of using timber, to keep the forest-felling going. It is an
unfortunate paradox that a conscious sense of conservation seems to come only after a
long period of devastation has made the need apparent. We ought to be able to do
better than that. It’s 30 years since Jacks and Whyte wrote their classic book *The Rape
of the Earth*, in which they gave it as their opinion that of all countries South Africa
had suffered the worst devastation at the hand of man. Well, today South Africa is one
of the most conservation conscious countries in the world. Britain, though she began
the Industrial Revolution and devastated landscapes in the northern counties, enjoyed
such a good climate that some scars were soon healed and a great deal of the country
remained beautiful: the Anglo-Saxon seemed to have an innate ecological sense for
fitting his villages and buildings into the right place in the landscape. So it took us
another 30 years after America to think seriously about the subject. We nearly left it
too late, but now that we are in it, I think we’re doing well, though not well enough.
I remember Herbert Morrison entertaining us in Downing Street when the Nature Conservancy was founded. He was very kind and told us that he thought nature was very important. I had no doubt of his conviction, only of his understanding of what it was all about. I respected him deeply for his open mind, which helped so much to establish the Nature Conservancy.

Almost immediately the Conservancy took its stand as a research body in a subject that needed both study and good will to make it effective. The National Nature Reserves which the Conservancy set about acquiring varied in size from a few acres to many thousands, and there were some public misgivings when it was found that these areas were not national parks. They were chosen as habitats, in which research for the better care of the country at large could be carried out. Much of this research has been what is sometimes called pure research, but some of it from the beginning was mission oriented. Of course, what appears pure today is applied tomorrow.

For 20 years the Conservancy has progressively realised that conservation isn’t just the importance of nature and all that, but a concern with the human being and his habitat, a concern for the survival of the human species on the planet from the environmental viewpoint. Sometimes nature has to be protected from the human species, and in conservation we do not subscribe to any notion that nature is worthy of protection merely for the enjoyment or education of the human being. Nature exists in its own right and our attitude to it is a measure of our consciousness of the whole situation of which our own survival is a part, not the be-all and end-all.

It is natural that each nation should have its own approach to conservation. Let’s take our own country first. England established a National Trust as long ago as 1895. Its first objectives were to care for the history and beauty of the country and encourage public appreciation. The movement has been enormously successful in the presentation of English country houses in their settings. This was environmental conservation with a special slant. The National Trust for Scotland first followed a similar course, but in 1943 appointed a committee on wild-life conservation and I would say that the Scottish Trust now leads the world in the wholeness of its approach to environmental management. There are the individual Scottish houses and their gardens and treasures, but it also looks after whole villages and small towns. The Scottish National Trust has also shown a readiness to join with other bodies interested, for example, in ornithology, in running the bird sanctuary and inhabited island of Fair Isle. The remote and spectacular island group of St Kilda is managed in partnership with the Nature Conservancy. Very soon a large district of the West Highlands will be run as a joint effort in multiple land-use management, the three owners being the Nature Conservancy, the Forestry Commission and the National Trust for Scotland. They may be joined later by some private owners.

Just after the First World War the Forestry Commission started as an organisation designed to grow sticks of timber. But since those pioneer days there has been a drastic change of outlook. The Commission is in the forefront of dedication to the philosophy of multiple uses. It preceded state action in establishing its own National Forest Parks, which in Scotland have to make do for the national parks that country has been denied. Further, in the last 20 years the Commission has planted its new forests with much more ecological awareness, using different species from acre to acre as the soil dictated. This has resulted in a considerable increase in the beauty of
our countryside because, let me emphasise, much of what we call beauty in the
countryside stems from conditions of ecological repose. We sense the beauty even if
we haven’t a clue about the ecology.

In England the National Parks Commission was a political sop to a popular idea. The
English National Parks were really regional parks, and the Commission had little
money or executive power. Care of the parks and provision of recreational facilities
have been quite inadequate. The men have been devoted but governmental backing
was timid and parsimonious. This situation has changed in that the National Parks
Commission has now been replaced by the Countryside Commission. With the
change, we’re hoping for a much more vigorous interest by the British government in
environmental affairs. There is, governmental and publicly, an increasing awareness
that what was called ‘Nature and all that’ is a natural resource that has to do with
national well-being.

‘The Countryside in 1970’, as it’s called, is a conference which has been in constant
session for several years, which held formal sessions in 1964 and 1967, and which
will presumably meet again for a grand winding-up in 1970. Under the chairmanship
of HRH the Duke of Edinburgh it has been an excellent device for co-ordination and
publicity. Through these years, Prince Philip has allowed no hot air, only good crisp
statement and argument. The co-operation of the national industrial boards in the
conference has been a distinctive feature. What happens after 1970 remains to be
seen, but in some new form the conference will need to continue, because 1970 marks
no millennium, though the fact that the Council for Europe has made 1970 ‘European
Conservation Year’ is significant. The urge is there all right, and a lot of first-class
scientific data, but not enough people, either in or out of power; nor do those in
development industries have a sufficient sense of urgency to value and preserve our
remaining bits of wilderness for their beauty, for their air- and water-purifying action,
or for their value as study areas.

The International Biological Programme, which has been in operation for some years,
has as its title ‘Biological Productivity and Human Welfare’. An understanding of the
energy flow of ecosystems is an essential part of this world-wide co-operation, and
the Terrestrial Conservation Section is stimulating international effort towards
acquiring sites that may be said to exhibit natural ecosystems at work. It has been
emphasised that IBP’s activities in this section must cover the whole Earth.
Experience in this international venture reveals how rapidly natural ecosystems are
being destroyed. I feel that the next five or ten years will be crucial.

Other Countries
Turning now to other countries: the United States has been in conservation as a direct
effort since 1910 anyway, but at that time there was very little scientific research on
which to base conservation as an applied science. There was great activity in wildlife
research, but the more fundamental work on the dynamics of ecosystems as applied to
conservation seemed to lag. The leeway is being made up now and the National
Science Foundation, with its large government funds, is doing a splendid job of
evaluating proposed researches and of supporting on an international scale those that
come through the careful screenings.
National parks constitute a particular United States contribution to world culture. The
3,200 square miles of Yellowstone in Wyoming were established way back in 1872
and the process is continuing, with many millions of acres involved. In addition there
are many sizable wild-life refuges for particular species or groups. These have no
absolute sanctity, but once established they take quite a lot of undoing. The biggest
headache for the US National Park Service is how to handle the human visitors. In the
early days it was necessary to persuade people to visit the parks; now, with a total of
around 150 million visitors, the necessity for canalising traffic and building hard-top
paths in fragile habitats is urgent. In this branch of management the National Park
Service is creating an expertise of which Britain is only slowly becoming aware.

Since the inception of the International Biological Programme, there has been a strong
movement in the United States to get representative ecosystems set aside as such on
the lines that the Nature Conservancy has followed in Britain. We all know how
difficult it is for a government agency to make a quick decision, and to part equally
quickly with a sizable sum of money. Because of this we lose potential valuable sites.
In the United States there is a very useful independent body also called the Nature
Conservancy. It is in effect a rolling fund guided by people with good ecological
knowledge. When some place of unique value is threatened, the American
Conservancy can jump in and buy an option pending survey, or buy the lot. The
property in question is then handed over to the state agency most concerned and the
purchase price is repaid in the time it takes for the money to be forthcoming. The
National Park Service has been handicapped in the past by an inability to act quickly
on buying in-holdings in national parks. The recent establishment of the National
Parks Foundation with a good rolling fund will do for the parks what the Nature
Conservancy does for other properties of ecological value. A similar fund is needed in
Britain despite the existence of the Town and Country Planning Act.

Russia tells us very little about what she is doing, but we do know that she is
committed to conservation from an entirely hard-headed point of view. The Russians
see quite plainly that many natural resources which we might consider only from the
aesthetic point of view can be made to yield a crop to mankind and still not lose
aesthetic value. By their action with the Tsaiga antelope of the steppes they have
conserved a diminishing stock till it now reaches three million head and yields half a
million carcasses a year for food and skins. This can be a surer way of conservation
than by relying on sentiment. Sentiment and ethics should never be confused. Ethics
stand firm and are to be sought by spiritual and intellectual effort of reflection.
Sentiment is a poor guide in the mosaic of ecology and conservation.

Ecologically, as well as politically, the eyes of the whole world are on Africa. What
are the new nations going to do with their continent and its incomparable wildlife
resources? My own feelings are mixed as to the role played in the past by the colonial
powers during their administration. Most British administrators wished to do the right
thing by both people and wild life, but if they’ had to choose one or the other, they
usually rather pompously chose people. The administrative group, the decision
makers, were not scientists, and the principal technical services were agricultural and
veterinary. The agricultural officers weren’t scientists either, and saw the continent in
terms of bags of maize, boils of cotton, and cattle, sheep and goats. The veterinarians
saw the tsetse fly as a prime enemy and the wild life as carriers of disease. It wasn’t
until the 1950s that ecologists from Britain and America really had a chance to show
the wide spectrum of hoofed animals in Africa as an interlocking guardian complex of the habitat, making a much better job of biological productivity than the intruding cattle, sheep and goats. Looking back, it is surprising how quickly the scientific attitude caught on in Africa. It’s the accepted way now, but the wild life is in as great danger as ever, or more so, because the population is increasing so fast.

As the countries of Africa gained independence, there was a voluble call from the Western world to save the wild life. Many well-known figures wrote eloquently to the effect that the wild life of Africa was a world possession. Mr Kenyatta picked this up immediately and in a very clever statement to the Arusha Conference of 1961 put the ball back in the white nations’ court by pointing out that if African wild life was a world possession, it must be a world responsibility to pay for it. The West gulped once or twice, but on the whole the richer nations have stumped up rather well.

National parks in Africa are an interesting story in themselves. The Belgians established huge and splendid ones in the east of the Congo. They exercised more power than the British were inclined to do, in that the Belgians decreed that the human being had no place in a national park. If they were there, they should be removed, and so they were. Human beings were not trusted vis-à-vis nature. I think this was mistaken policy, but the Belgian parks were undoubtedly magnificent, even into the time of independence. In South Africa the Kruger National Park is best-known, but it is only the largest of many in that country. The magnificent Ngorongoro Crater was excised from the Serengeti National Park of what is now Tanzania even under British rule, but the Serengeti Plains still provide the greatest surviving pageant of the migrating herds in Africa.

Naturally, we are all glad about the national park movement in Africa, but for myself I do see dangers. I’ve heard men who ought to know better say that the future of African wild life lies in the national parks. This puts the animals into enclaves, or at worst, ghettos. If representative African wild life is to survive, there will need to be many more national parks than there are now, and that is scarcely likely. Alternatively, the value of wild life as part of the biological productivity of a region, and its place in protecting such habitats as cannot be brought under intensive agriculture, must be realised. Immense areas of African soil are poor and brick-like, and if they are bared to agriculture, or wrongly grazed, their last state is very much less productive than their first.

I once read in what was intended to be an authoritative report that as there were so many hoofed animals in Africa, obviously there must be great scope for stock-breeding. This is a quite fallacious argument, and fortunately the report had no great influence. The ecologist has a moderately good hold in Africa these days and there is a strong pro-wild-life interest abroad in the world, but I repeat: world opinion should not sit back feeling that its job is done with the establishment of national parks. We in the West pay for African wild life, and rightly, but the ultimate criterion for survival is the human population. If that rises for another 30 years as it is doing now, all the efforts of the past 15 will be to no avail.

The International Union for the Conservation of Nature is only 21 years old. It runs on a shoestring, but as a clearing house and a finger on the pulse of world affairs in wild-life conservation, it has done a remarkable job. Gone are the days when ‘protection’
was in its title instead of ‘conservation’: the world has woken up to the main ecological fact, that protection of any one creature or complex of species depends primarily on the persistence and survival of the habitat. That is conservation, and it applies the world round, from Tropic to Arctic, from the deep ocean to the seashore.

To sum up, I am not utterly pessimistic, but there is not the slightest justification for any smug, starry-eyed satisfaction that the world’s wild life is now safe in our enlightened care. Time is not on our side and our present enlightenment may not go far enough.