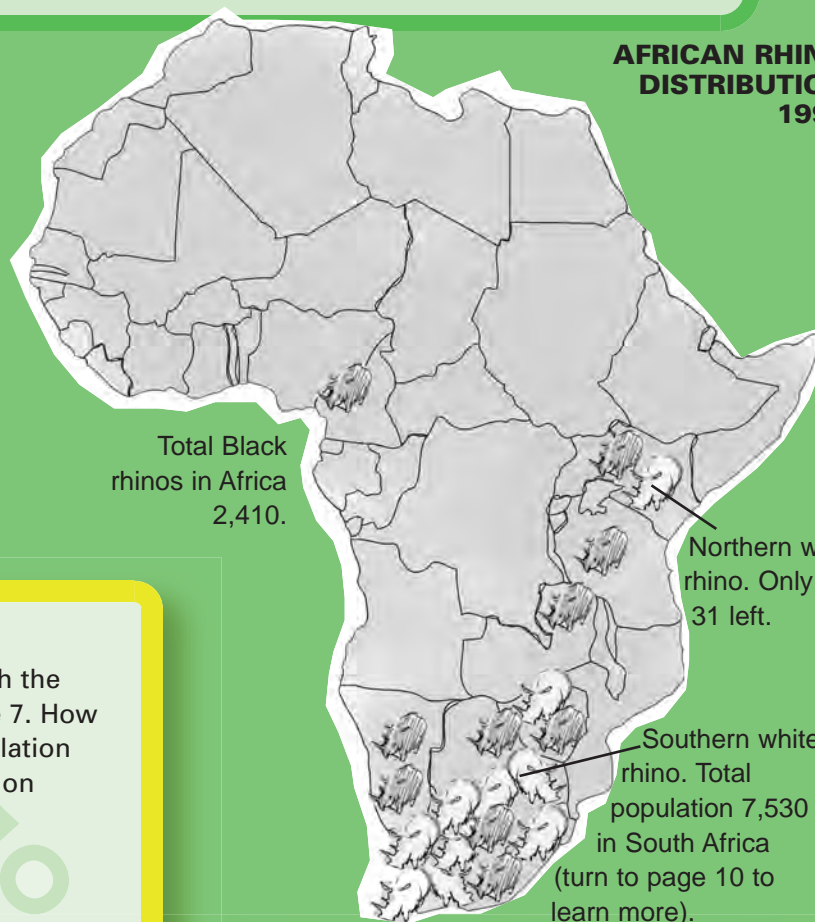


Rhino Populations

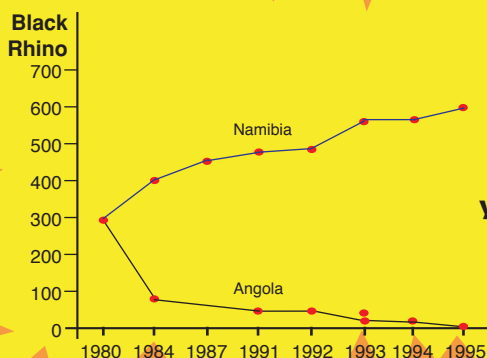
	1980	1984	1987	1991	1992	1993/4	1995
Angola	300	90	?	50	50	10	0
Botswana	30	10	<10	<10	5	4	0?
Kenya	1500	550	381	398	414	417	420
Malawi	40	20	25	5	0?	2	2
Mozambique	250	130	?	50	50	45	?
Namibia	300	400	449	479	489	583	598
South Africa	630	640	577	771	819	897	1024
Swaziland	0	0	6	6	6	4	9
Tanzania	3795	3130	275	185?	127	132	32
Zambia	2750	1680	>106	40?	40	33	0?
Zimbabwe	1400	1680	1775	1400	425	318	315
AFRICA	14,785	8,800	3,665	3,450	2,475	2,550	2,410

Black rhino population estimates 1980-1995

From the graph and the table work out what the black rhino population would be in 2005 if this rate of killing continued.



Compare with the map on page 7. How has the population and distribution changed?



Using the information in the table above, make a graph of the black rhino population in your country. What does your graph tell you? How does your graph compare to the graph of all of Africa's black rhino at the top of the opposite page?

In most countries more rhinos were being killed than were being born. In some countries all the rhinos were killed. In these countries the rhino is considered **NATIONALLY EXTINCT**.



What does **EXTINCT** mean?

Extinct is when there are no more of that species alive.

Why worry about extinction?

Many different species of animals and plants make up the natural world we live in. There are many different links between plants and animals and the earth, air and water. There are so many links that we do not understand all of them or how removing one species will change the balance of nature that we all depend on. By protecting the plants and animals we share the environment with we are protecting ourselves. Rhinos are also economically important e.g. Tourism.

In which countries has the black rhino become extinct?

Protecting other species is an important part of protecting ourselves.



Fortunately the black rhino has not become extinct in all countries. The populations are so small that unless something is done to reduce the number of rhinos being killed it is possible that the species will be wiped out completely. This is why the black rhino is called a **CRITICALLY ENDANGERED** species.

Conserving resources is all about making sure that there are resources available in the future. When resources are not conserved the health of the environment is reduced and our own survival becomes at risk.



What has been done to help save the rhinos from extinction?



Specially PROTECTED AREAS have been set up in many countries. Rhino Conservation Areas and Intensive Protection Zones on State land are well patrolled by anti-poaching teams. Rhino Sanctuaries and Rhino Conservancies are often fenced and patrolled to help keep the rhinos safe from

Sometimes the rhinos' horns are cut off by conservationists so that the poachers can not get them. This is called DEHORNING and it does not hurt the rhino. It is like cutting off your finger nail. The horn slowly grows back. Dehorning is expensive to do.



Special international laws have been made to control trade. CITES – Convention on International Trade in Endangered Species. This convention regulates the trade in animals and animal products. Animals that are facing a high risk of extinction, like the black rhino, are listed in Appendix 1 of CITES. It is illegal to trade any part of an animal on that list.

It is illegal to kill a rhino without a special permit from government. Some countries have made black rhinos a **SPECIALLY PROTECTED SPECIES**. Killing a rhino is treated as a more serious crime than killing other animals. Killing a rhino is not just killing a single animal, it is threatening the survival of an entire species. In South Africa and Namibia rhino poachers have received sentences of 10 and 20 years respectively. In some places rewards are offered to people who provide information that helps put rhino poachers in jail.

EDUCATION is also an important part of helping protect the rhinos from extinction. **May people that live close to rhinos are not aware that there are so few of them in the world and that they are important to protect. Making the people of Asia and the Middle East aware that the horn they are buying is driving the rhino to extinction is also important. In Asia they are encouraged to use other drugs. In the Middle East alternative materials like water buffalo horn are being used to make the handles for jambiyas.**



By 1895 the Southern white rhino had been reduced to a single population in the Umfolozi area in South Africa. With good protection from poachers the population recovered and South Africa has helped re-establish white rhinos in countries where they had become Nationally Extinct.

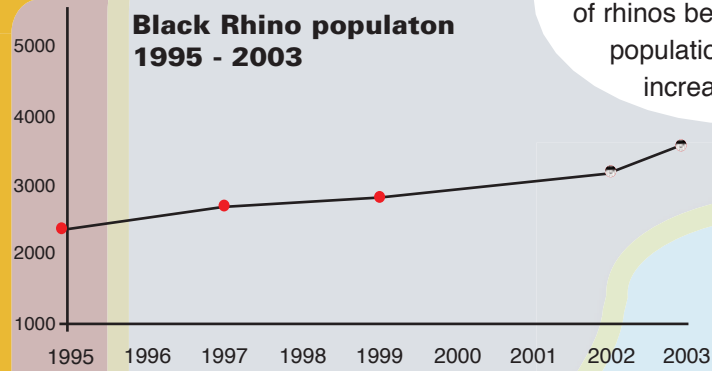
The recovery of the Southern white rhino is one of the great success stories of conservation in Africa and shows that with good protection and management it is possible to save rhinos from extinction.

Black rhino populations are also recovering. Black rhinos have been reintroduced to Zambia and Botswana.

Southern white rhino populations

	1895	1929	1948	1968	1987	1995
Angola	0	0	0	0	0	0
Botswana	0	0	0	0	125	20
Kenya	0	0	0	0	47	122
Namibia	0	0	0	0	63	107
South Africa	20	150	550	1,800	4,137	7,095
Swaziland	0	0	0	0	80	41
Zambia	0	0	0	0	6	5
Zimbabwe	0	0	0	100	208	138
AFRICA	20	150	550	1,900	4,665	7,530

The special laws and protected areas have helped reduce the number of rhinos being killed and the populations have been increasing slowly



There needs to be over 2,000 of each subspecies of rhinos before they can be considered no longer threatened with extinction.

Sub species	Popn. in 2003
<i>C. simum simum</i>	11 100
<i>C. simum cottoni</i>	22
<i>D. bicornis longipes</i>	5?
<i>D. bicornis michaeli</i>	352
<i>D. bicornis bicornis</i>	1 309
<i>D. bicornis minor</i>	1 784

To help the populations increase as quickly as possible the people who manage rhinos try to work out how many rhinos can live in an area before they start to compete for food. This number is called the **CARRYING CAPACITY**. While the population is below carrying capacity the animals have plenty to eat and reproduce well. Once the population is higher than the carrying capacity the animals lose condition, spend more time looking for food and may even fight over food - this makes them breed slower.

what has

To know when the population is at carrying capacity you need to know how many rhinos you have. This is done by **MONITORING** the rhinos. Special rhino scouts check on all the rhinos regularly. The scouts even give the rhinos names. To help identify different rhinos cuts are made into their ears so that they look different to other rhinos.



How did she find me? It must be that thing they put on my horn.



Some rhinos have **HORN TRANSMITTERS**. These transmitters send out a signal like a radio station sends out music. The signal is stronger the closer you get to the animal and this helps locate exactly where the rhino is. It is difficult to tell if a horn has a transmitter in it.

When the population starts to reach carrying capacity rhinos can be moved out of the area to reduce competition. These rhinos are used to start new populations.



Some communities have helped increase the land available for rhinos by keeping some areas for wildlife.



been done

Ride For Rhinos



Two Zimbabwean girls rode 22,000km from Glasgow, Scotland to Harare, Zimbabwe to raise US\$1M for the Zimbabwe Rhino Survival Campaign in 1988.



A Kenyan man walked from Mombasa to Nairobi. He then walked across five European countries and from there went on to walk America. He raised well over a Million US dollars to fund rhino conservation.

People living close to rhinos can play a very important role in helping save rhinos from extinction.

What can we do to help save the rhinos from extinction?



Educate others. Not everyone knows that rhinos are threatened with extinction and need our special protection. Find out more about your rhinos. Ask someone who works with the rhinos to give a talk at your school.

Help protect the rhinos from poachers. Poachers looking for rhinos to kill will often ask the local people for information and help when they come to kill rhinos. Report these people to the authorities or the scouts so that they can increase their patrols or catch the poachers. Some areas offer cash rewards for information used to put rhino poachers in jail.



Not all rhinos are killed deliberately. Rhinos can get injured or killed in wire snares put in the bush to catch other animals. Report or remove snares you find in areas where rhinos live. It is also important to report unusual spoor sightings. A rhino that has a snare wound will often drip blood or drag its leg as it walks. Removing the snare quickly can save the rhinos life.

IF YOU FIND RHINO TRACKS OUTSIDE THE PROTECTED AREA REPORT THIS TO THE GAME GUARDS.

South Africa has been very successful in protecting its rhinos from poachers and now the Southern white rhino is no longer facing the threat of extinction. Because the populations are growing rhinos are now sold at live game sales. In 2003 R 420,000 was paid for a white rhino cow and calf. Every year black rhinos are also sold at auction. A single black rhino is worth US\$60,000.



People travel from all over the world to visit Africa to see the "BIG FIVE" - RHINO, ELEPHANT, BUFFALO, LION and LEOPARD. No where else in the world is it possible to see such large and impressive animals living together in the wild.



Rhinos are very valuable as tourist attractions because they are so rare and unusual.



14

Many people now believe that it is more profitable to keep wild animals than livestock like cattle especially in dry areas where droughts are common. Wild animals like rhino, elephant, kudu and zebra do well in these areas and do not damage the environment like cattle and other livestock do.



Rhino Conservation

As the populations of rhinos increase so do the numbers of other wild animals that live with the rhinos. Areas with lots of wild animals attract lots of tourists.



bring in foreign currency which is important to the national economy.



need guides



tourists...

need places to eat and sleep when they are visiting

- HOTELS EMPLOY
- guides
 - maids
 - waiters
 - managers
 - clerks
 - bookkeepers
 - drivers
 - cooks



like to buy curious

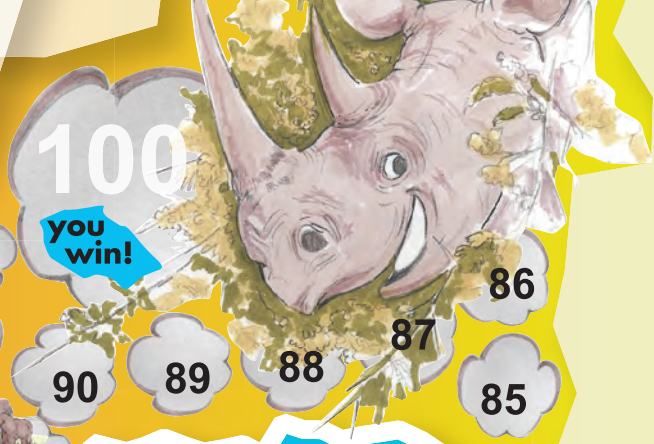


With good conservation many more people can benefit from the value of rhinos instead of just the poacher receiving money for the horn.



the Rhino game

Ready set Go!



100
you win!

47
Poacher kills female rhino. Loose her and every calf she would have produced

46
Rhinos breed well in good habitat with lots of food.

83
Adult rhinos get caught in wire snares.

More calves are born.

32
Poachers kill rhinos for their horns.

24
Rhino calves are killed in wire snares.

16
Scouts remove wire snares before rhinos get caught.



rules

4. If you land on spoor with a rhino cow and calf move forward to the spoor they run to.
5. If you land on a spoor with a rhino horn move back to the spoor the rhino horn touches.
6. Your goal is to get to 100 rhinos first.

1. Up to four can play.
2. Take it in turns to move.
3. Throw a die or stones or use a spinning wheel to score moves.

start

