Sir Peter's Paradox

In 1961, when Sir Peter Scott predicted that the black rhino would be extinct in three decades, he was only about two thousand animals and two and a half years short of a bull's-eye. But when you get this close to the bottom of the graph, something happens. The trend warps. Either the speculators pull the species down faster or the conservationists grit their teeth and absolutely and utterly refuse to let it go. *Ian Redmond* considers the cause for the optimism emanating from, yes, the UN Envoy for Rhinos.

"If it goes on like this, the black rhinoceros will be extinct in 30 years." This was the warning given in 1961 by Sir Peter Scott, on his BBC television programme *Look*. Numbers across Africa were then thought to be falling at about 20 per cent a year. With an optimum annual birth-rate of only 5 per cent, the line on the graph was heading towards zero.

And here we are, 32 years later, almost bang on target. Despite the best efforts of Sir Peter's creation, WWF, despite the Species Survival **Commission Rhino Specialist** Group, despite Operation Rhino and Save the Rhino and all the other rhino-friendly organisations, the downward slope on the graph continues. So inevitable does extinction seem that it is said to be a factor in the speculative buying of rhino horn. Nothing, it seems, is able to stop this trade. Doom. Gloom. Despondency.

And yet, at a press conference in London last December, following his whistle-stop tour of 10 African and Asian countries, Dr Esmond Bradley Martin, the newly appointed UN Envoy for Rhinos, said he was optimistic. "People are finally realising," he told BBC WILDLIFE, "that it is possible to save the rhinos. I keep hammering away at the pessimists with success stories – successes which are in some of the world's poorest countries."

He reels off examples of countries which have taken firm action either to close down the trade in rhino-horn products or to protect their remaining rhinos (see map). It seems that where there is a will, there is a way – provided that the will is at the highest political level. In Nepal, for example, the king himself has ordered the protection of rhinos, and, the governments of both Kenya and India have provided sufficient political will and commitment to control the poaching. "If these poor countries can do it," says Dr Bradley Martin, "others can too."

There is an old joke which explains the difficulty in solving political problems as a case of mind over matter: those who mind about the problem don't matter, and those who matter don't mind. This has clearly been the case in those countries where rhino-horn trade has gone unhindered, often in the face of national laws and international treaties which forbid it. But how can the people who matter be reached by the people who mind about saving rhinos? In recent months, we have seen a number of different approaches to this key problem. And for once, some of them seem to be working.

Perhaps it is an idea whose time has come. The trigger for the latest 'rhino crisis' was the shocking realisation last summer that Zimbabwe's black rhino population was only a quarter of what had been officially claimed (see BBC WILDLIFE, November 1992). The press reports were seen by Dr Mostafa K Tolba, executive director of the UN Environment Programme (which, among other things, administers CITES, the Convention on International Trade in Endangered Species).

Dr Tolba reacted with unbureaucratic speed in a number of unprecedented ways. Within a matter of weeks he had:

• created the post of UN Special Envoy for Rhinos, the first time this has ever been done for a species (other UN special envoys represent countries or regions). Dr Bradley Martin was appointed and then dispatched to gather upto-the-minute information from key countries;

• written personal letters for Dr Martin to present to the leaders of these 10 countries, thus ensuring that his envoy would be able to hold discussions at the highest level;

• provided (although UNEP is

Asian consumers and traders

China: CITES signatory, but hasn't complied with resolution asking members to ban internal trade in rhino horn; has agreed not to import more horn, but present stock of 8+ tonnes will last for 13 years at present rate of use; UN visit prompted ban on export of rhino-horn medicines.

South Korea: Non-CITES; in 1988, was major consumer of rhino medicines, but no recent survey; UN visit "discouraging"; won't admit to a problem; unwilling to set an exact date for joining CITES; next target of an **Environmental Investigation** Agency (EIA) campaign. Singapore: CITES signatory; in November 1992, announced ban on internal rhino-products trade. Taiwan: Non-CITES (and cannot join because UN does not recognise it as a country, only a region of China); the trade organisation TRAFFIC estimates 4-9 tonnes of horn stocks in pharmacies, and unknown quantities in dealers' stockpiles; UN visit "disappointing" because lack of will to combat trade; but a ban on internal rhino-horn trade followed EIA pressure.

Other countries: Markets for rhino-horn products have been closed down in: Japan, Hong Kong, Malaysia, Indonesia, Nepal, India, Brunei and the Philippines.

Middle Eastern consumers and traders

United Arab Emirates: CITES signatory; Emirate of Dubai was trading post for ivory and rhino horn, but ruling family put a stop to it after EIA and WWF exposure in 1989; Emirate of Sharjah had 200kg of rhino horn pass through to Yemen in 1991; UN visit prompted Sheikh Sultan bin Muhammed al-Qasimi to crack down on traders, to improve international image. Yemen: Non-CITES; banned import of rhino horn for dagger

not normally a funding agency) an immediate US\$10,000 to the Zimbabwe Wildlife Department specifically for anti-poaching intelligence-gathering activities; • with the Television Trust for the Environment (TVE), cofunded a documentary film on the trade and his envoy's interviews with dealers.

The TVE film not only has dramatic footage of South African police raiding a dealer's premises and catching a famous rugby player in the act of buying rhino horns, but also showed for the first time to Western cameras the manufacture of 'medicinal tea balls' in China. This is the remedy which kills rhinos – pills the size of marbles and coated with a layer of wax. Patients are advised to take them dissolved in handles (djambia) and re-export of shavings, but smuggling a problem; In May 1992, religious leader the Grand Mufti condemned killing rhinos for horn. Following Dr Bradley Martin's visit, the Ministry of Supply and Trade banned the internal trade in raw rhino horn in December. Owners of horn have been ordered to register stocks with the ministry. Less than 3 per cent of daggers made today have rhino-horn handles.

CITES is the Convention on International Trade in Endangered Species, which monitors or prohibits trade in those wild species (or their parts) listed on its appendices. Countries that are 'signatories' to it agree to ban or license trade according to CITES rules.

African states still with rhinos

Kenya: CITES signatory; burned stockpiles of rhino horn and ivory; black rhino population now 410 and rising (mostly in heavily guarded sanctuaries). Namibia: New CITES member, and very pro-trade; black rhino population (including desert rhinos) more than 450 and rising. South Africa: CITES signatory; black rhino population of 780 and rising; more than 5,000 white

rhinos. Despite efforts of Endangered Species Protection Unit, much rhino horn is still smuggled through SA to Taiwan. **Tanzania:** CITES signatory; probably fewer than 200 black rhinos.

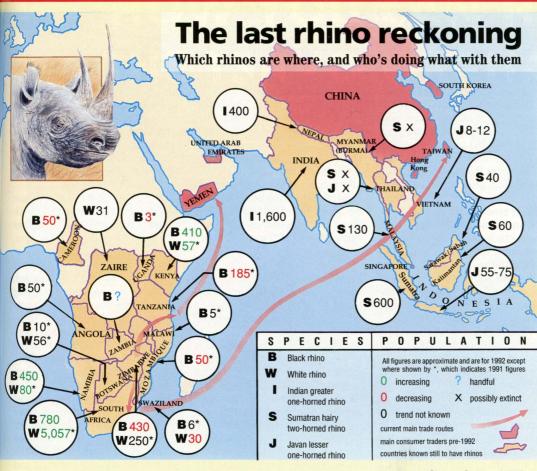
Zaire: CITES signatory; has last northern white rhino population (in Garamba NP), 31 animals. Zambia: CITES signatory; broke away from ivory marketing cartel in 1992 and burnt ivory and rhinohorn stocks; rhinos have been virtually wiped out by poachers, but dealers in Lusaka still trade in horn from Zimbabwe. Zimbabwe: CITES signatory and

a cup of hot tea to alleviate a whole range of symptoms, from fever to night-blindness and myopia.

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The small staff of the Environmental Investigation Agency (EIA) were dubbed 'ecodetectives' by the press, following their exposé of the ivory trade. But the reason for their success is not just the information they gather. It is the way they use it as a political lobbying tool. It was only a few months ago that the EIA decided to take on the rhino trade, and the success of their campaign has surprised even them.

It was clear that the business centred on markets in China, Korea, Taiwan and Yemen. EIA director Allan Thornton told BBC WILDLIFE: "We decided that to



remaining so, despite threats to walk out; most vocal proponent of theory that trade is good for endangered species; at the 1992 CITES meeting (in Japan), had to withdraw proposal to downlist rhinos for limited trade. Black rhinos down to 430 or under (from earlier 1992 estimate of 1,700), of which 120 now dehorned. **Others:** Rhino numbers are down to a handful in several African countries, and have recently been exterminated in several others.

Asian states still with rhinos

Note: Asian rhino horn is worth 10 times that of African, and is

believed to make a more powerful medicine.

India: CITES signatory; greater one-horned population of about 1,600; despite civil unrest in Assam, and some poaching, rhino numbers are slowly rising (would recover faster if poaching ended). Indonesia: CITES signatory; lesser one-horned population in Java of only 55, but stable. Hairy twohorned population in Sumatra of about 700, but scattered; subject to habitat loss and poaching. Malaysia: CITES signatory; hairy two-horned population about 130 in peninsular Malaysia, 40 in Sabah/Sarawak.

Myanmar (Burma): Non-CITES;

formerly thought to have populations of all three Asian rhino species. 1992 survey by forestry department suggests Indian and Javan rhinos extinct; Sumatran rhino tracks found in north Burma. Nepal: CITES signatory; greater one-horned population of about 400 and rising; plans to burn stocks of rhino horn, but seeks compensation to be spent on protecting rhinos. Vietnam: Recently discovered population of 8-12 lesser one-horned (Javan) rhinos. Thailand: Likely to be very few, possibly extinct.

take on four countries at once might seem a little ambitious, and most of our leads seemed to point to Taiwan . . ."

On 16 November 1992, the EIA, backed by the David Shepherd Conservation Foundation and Tusk Force, launched a boycott of goods made in Taiwan; the message was that profits from Taiwan's manufactured goods were being used to buy rhino-horn products - which was stretching a point but, at least indirectly, might have been so. The aim was to persuade the Taiwan government to ban the sale of rhino-horn products, and to enforce this and the existing law already banning the importation of raw horn.

The immediate response from

Taiwan was a blustering protestation of innocence, followed by threats of legal action against these three tiny organisations that had the temerity to challenge economically a country with more foreign exchange reserves than any other. Then, three days after the London press conference (headline news in the Taiwan media), came the surprise announcement from Taiwan's prime minister: internal trade in rhino horn and its products would be banned forthwith, and the ban was being enforced with immediate effect.

It would seem that bad press among Taiwan's trading partners was a more effective lever than gentle persuasion from the UN, but given that the UN does not even recognise Taiwan as a country, perhaps this is hardly surprising. The fact that, just before the EIA press conference, Singapore announced a new law banning internal trade in rhinohorn products probably helped, too. The spotlight of international disapproval is now being focused on South Korea and China, in an attempt to keep the momentum.

But a sudden success like the one in Taiwan is not the end of the story. Unless the demand for rhino-horn medicines is reduced, the trade will simply carry on under the counter, the dealers will continue to grow rich, and the poachers will still be paid their pittances to kill rhinos.

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The ivory ban worked because wealthy people were shown how their ivory status symbols were

acquired, and they wanted no part of it. But people who buy rhino-horn medicine do so because they believe it will cure an illness. It is said to be particularly good at reducing sometimes fatal fevers in children, and so it is understandable why a parent might buy it. How, then, do we reach that huge marketplace of people in China and South-east Asia who place their faith in traditional medicine? Offer traditional alternatives? Offer modern drugs? Appeal to their consciences?

One controversial approach was proposed recently by Dr Bill Clark of Friends of Animals. He suggested at a CITES Standing Committee meeting last June that rhino horn might be denatured made unfit for human consumption. Wild rhinos would be darted in the full glare of international publicity, their horns would be painted with a cocktail of chemicals (the effects of which, he suggests, might range from socially embarrassing flatulence and diarrhoea, to impotence), and then the animals would be released. Potential users would then be blitzed with press coverage telling them the consequences of consuming rhino horn.

Reaction to this suggestion ranged from serious interest to complete outrage – the Namibian delegate described Dr Clark as an "eco-terrorist," but Namibia is one of the countries which would like to reopen a legal trade in rhino horn. But by a somewhat chilling twist of irony, research in the United States indicates that there is no need to add toxins to rhino-horn medicines: they already contain dangerous poisons, put there by the manufacturers.

Chemically, rhino horn is more or less the same as hair and toenails - a form of keratin. But researchers at the Forensic Laboratory of the US Fish and Wildlife Service (USFWS) have discovered that rhino keratin has a lower molecular weight, a higher sulphur content, and a lower pH value (by iso-electrofocusing) than keratin from other species. This is useful because to prosecute someone for importing rhino-horn medicines, it is first necessary to prove that there really is rhino horn in the pills.

This work is not complete yet, and will not be published in full for some months, but Dr Edgard Espinoza of the USFWS laboratory, revealed that in the two brands of Asian medicinal tea balls he tested, no traces of rhinospecific keratins were found. It would therefore appear that ▶ someone is being conned.

Not only are the patients who buy this medicine not getting what they pay for, they may actually be poisoning themselves or their children. Dr Mary Jacque Mann, also of the USFWS laboratory, ran tests on 10-20 samples from each of 10 brands of the tea balls. Every sample contained toxic elements such as mercury, arsenic and/or lead (quantitative analyses are now under way). The tea balls' packets showed them to have been manufactured in several Chinese cities - Beijing, Tientsin, Guangzhou and Tianjin. So it is unlikely that the contamination is accidental. It may be that the recipe for tea balls includes chemicals which have been rejected by Western medicine as being too toxic.

Dr Espinoza told BBC WILDLIFE, "We have had a sudden increase in calls for advice regarding rhinohorn detection — previously the interest was mainly in ivory. One scientist from Taiwan who visited recently said she had recorded an increase in mortality in children after taking tea balls. She did not know why, but went away with the results of our tests to investigate further."

If medicinal tea balls contain dangerous levels of toxins, the customers clearly need to be alerted at once. And the fact that some of them do not contain rhino horn also needs to be publicised. Legal trade in these 'medicines' has now been stopped in Taiwan, and further exports from China are banned. But in China, the world's most populous nation, there are estimated to be nearly 8.5 tonnes of rhino-horn stocks, according to Dr Bradley Martin, and the annual consumption is about 650kg per year.

Following his visit, China announced a ban on exports of medicines containing rhino horn, but is refusing to comply with a CITES resolution calling for a ban on internal trade, claiming that the dealers should be allowed to sell their 'legally acquired', pre-CITES stock of horn.

Conservationists fear that these stocks will be replenished from poached rhino and that, even if China is the only country still using rhino horn, the size of the market will be enough to continue to fuel the poaching and drive the rhinos to extinction.

There is another way to bring pressure to bear on the rhinotrading countries: a clause in US law called the Pelley Amendment. This says that if any country can be shown to be undermining an international agreement to protect an endangered species - in this case, CITES - the US Government can ban imports of all wildlife products (including fisheries) from that country. In November 1992, WWF-US and the **US National Wildlife Federation** filed a proposal to list South Korea, China, Taiwan and Yemen under the Pelley Amendment, to "signal to these countries – and the rest of the world – the seriousness with which the United

States views the illegal trade in rhino horns . . . "

It will be some time before a decision is taken on this, but the mere threat of such a sanction, with its impact on multi-milliondollar fisheries trade, may be enough to do the trick. This is particularly important because the US is to host the next CITES meeting in 1994, and there will undoubtedly be moves, from Zimbabwe and its allies, like those last year in Japan, to reopen a legal trade in rhino horn. How the US government stands on this issue will undoubtedly influence many other CITES member-countries as they cast their votes.

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There are also moves afoot, by those who wish to encourage trade in wildlife products, to change the whole nature of CITES. The point of CITES is to protect species whose survival is being, or might be, threatened by international trade. But the spread of 'sustainable utilisation' as a primary aim of wildlife management often runs into problems under CITES. The failure of CITES to end the illegal rhinohorn trade is now being used as an excuse to restructure the whole convention, making its goals as much to do with continuation of trade as the protection of species. This is a worrying trend because it is not CITES which has failed the rhino. It is the poor implementation of CITES - the failure of the people who matter to carry out the democratically voted decisions and resolutions of the people who mind.

Many conservationists fear that CITES is being rewritten by an ideological lobby which is ultimately driven by those who stand to benefit in some way from the trade which will result. It is not that there is anything wrong with the principle of sustainable utilisation, the problem lies in the apparent desire to apply it across the board, to all species.

CITES can be likened to a dam across a river of rhino trade, with conservationists and customs officers in the role of the beavers. The dam is well built, and most of the flow has been stopped, but every time one leak is plugged, another one – another smuggling route – appears. Leakage is now down to a trickle, but the rhino populations are so low that there is a drought of rhinos to feed the trade – because for years there were more leaks than there were new rhinos.

But the leaks are being plugged faster now that rhinos have become the issue of the moment. If we succeed, we will then need a long period during which the rhino trade is totally dammed, and the level of rhinos allowed to rise. And to bleed this dam analogy a little longer, the last thing the rhino puddle needs now is a sluice-gate of legal trade. Otherwise the rhinos will run dry, and Sir Peter Scott's dire prediction will come true - and only a few years behind schedule.

Rhino rescuers Who's doing what for rhinos

Care for the Wild, 1 Ashfolds, Horsham Road, Rusper, West Sussex RH12 4QX. Funds fencing and maintenance of Rhino Ark, a sanctuary in the Aberdares National Park, Kenya.

Environmental Investigation Agency, 2 Pear Tree Court, London EC1R ODS. Exposes traders and smugglers. With Tusk Force and David Shepherd Conservation Foundation, launched boycott of goods from Taiwan.

Friends of Conservation, Sloane Square House, Holbein Place, London SW1W 8NS. Funds protection of 30 rhino in Masai Mara, Kenya. Runs an adoption scheme.

Rhino Rescue Appeals Office, PO Box 1, Saxmundham, Suffolk IP17 3JT. Funds protection of sanctuaries in Kenya and Zimbabwe.

Rhino Rock Wildlife Trust, 2 Scarsdale Studios, Stratford Road, London W8 6RE. Conservation education by bringing together children, animals, music and film. Funds sent to Zimbabwe and Sumatra.

Rhinowatch, Biology Dept, Royal Holloway and Bedford New College, University of London, Egham, Surrey TW20 0EX. Offers chance to do fieldwork in Zimbabwe with Earthwatch; census and ecological research. Save the Rhino International, 105 Park Street, London W1Y 3FB. Funds to Garamba National Park, Zaire (northern white rhino) and Sumatra (hairy rhinos).

Sebakwe Black Rhino Trust, Manor Farm, Ascott under Wychwood, Oxfordshire OX7 6AL. With Midlands Conservancy of Zimbabwe, funds sanctuary. TRAFFIC International. Funded by WWF. World's largest wildlifetrade monitoring organisation. Tsavo Rhino Sanctuary Appeal, Born Free Foundation, Cherry Tree Cottage, Coldharbour, Dorking, Surrey RH5 6HA. In conjunction with David Sheldrick Wildlife Appeal, funds sanctuary in Tsavo National Park, Kenya. **Zoological Society of London**, Regent's Park, London NW1 4RY. Seconded a rhino co-ordinator (research and conservation) to Kenya Wildlife Service ; advises Faith Foundation's work in Tanzania.

Based in the US

Rhino Task Force, c/o Teresa Telecky, Humane Society of the US, Wildlife and Habitat Section, 2100 L Street NW, Washington DC 20037, USA. Co-ordinates rhino-conservation activities of organisations including African Wildlife Foundation, Animal Welfare Institute, EIA and Wildlife Conservation International.

Based in Africa East African Wildlife Society,

PO Box 20110, Nairobi, Kenya. Supports various rhino projects and the fund/awareness-raising walks of Michael Werikhe.

Rhino and Elephant Foundation, PO Box 381,

Bedford View 2008, South Africa. Protection of rhinos and elephants in Asia and Africa; produces journal and regular newsletters. **Rhino Survival Campaign**, c/o Zimbabwe National Conservation Trust, PO Box 8575, Causeway, Harare, Zimbabwe. Equipment and support for anti-poaching patrols in Zimbabwe's national parks.

Save the Rhino Trust, PO Box 22691, Windhoek, Namibia. Conservation of desert rhinos and elephants in Damaraland and Kaokoland, Namibia, including innovative community wildlife schemes.

Save the Rhino Trust, PO Box 320169, Woodlands, Lusaka, Zambia. Protection of, and research on, rhinos in Luangwa Valley, Zambia.

Based in Switzerland

WWF International, (WWF UK, Panda House, Weyside Park, Godalming, Surrey GU7 1XR). Funds almost all trade studies and has projects in virtually all rhino range states.

Most of these organisations have limited resources, and so if you write requesting information or a receipt for a donation, please enclose a large sae.