From: Amy Hinsley [Amy.Hinsley@fauna-flora.org]

Sent: 29 March 2010 16:43

To: Jenny Birch

Subject: RE: Press Releases - Darwin

Hi Jenny,

Here is one list from our comms team, see below for other links (all copied from various emails, so if it states 'current issue' this was likely to be current last year!). It got a lot of coverage!

With regards to the website, would you like to draft something from the information that you have and I will have a look at it? Do you have any pictures? I will also write a news story for the website based on what you send over, just to get some people visiting the page!

Deforesting the Forbidden Fruit – The ancestral apple that Eve might have bitten in biblical times -- and the original species of many domestic fruits we eat today -- are threatened with extinction in Central Asia.

Commodity online (bit random): <a href="http://www.commodityonline.com/news/Fruits-and-nuts-are-losing-their-wild-ancestors-17569-3-1.html">http://www.commodityonline.com/news/Fruits-and-nuts-are-losing-their-wild-ancestors-17569-3-1.html</a>

This Week - The Red List of Trees in Central Asia story has gone into the current issue of The Week magazine. We have a copy here for FFI Comms records but I can't email the scanned article (due to licensing laws...)

http://www.telegraph.co.uk/earth/agriculture/food/5294653/Ancient-forests-which-gave-us-the-apple-are-in-danger-of-extinction.html

http://www.independent.ie/world-news/asia-pacific/death-in-the-orchard-of-eden-1733613.html

http://www.freshplaza.com/news\_detail.asp?id=43334

http://www.redorbit.com/news/science/1684988/study suggests wild fruit trees could be close to extinction/index.html

http://www.agbios.com/main.php?action=ShowNewsItem&id=10681

 $\frac{http://yubanet.com/enviro/As-apples-blossom-in-the-UK-their-wild-ancestors-face-extinction.php}{}$ 

http://www.telegraaf.nl/buitenland/3869426/ Wilde fruitbomen sterven uit .html (apparently De Telegraaf is the largest Dutch daily newspaper, with a circulation of 800,000 - not bad!)

It was also written up by Asia news International (ANI) which is South Asia's biggest news agency. The sites below ran the ANI article:

http://www.sindhtoday.net/health/94347.htm

http://www.britainnews.net/story/498993

http://www.newspostonline.com/uncategorized/wild-fruit-trees-in-danger-of-becoming-extinct-2009050853664

http://www.duniyalive.com/?p=23060

http://www.littleabout.com/2009/05/08/wild-fruit-trees-in-danger-of-becoming-extinct/

http://news.smashits.com/381776/Wild-fruit-trees-in-danger-of-becoming-extinct.htm

http://www.newstrackindia.com/newsdetails/94933

http://www.topnews.in/wild-fruit-trees-danger-becoming-extinct-2163422

Last but certainly not least, Georgina has kindly agreed to be interviewed by the BBC for The World Tonight on BBC Radio 4: http://www.bbc.co.uk/programmes/b006qtl3

### MEDIA COVERAGE OF FFI FRUIT AND NUT PROJECTS



Kazakhstan and Kyrgyzstan are thought to be the ancestral homes of familiar favourities such as Red Delicious and Golden Delicious.

species and include them in breeding programmes."

The US Department of Agriculture has already sponsored expeditions to Kazakhstan, during which scientists have collected samples with the aim of expanding the genetic diversity of farm-grown apples.

This type of genetic foraging, Dr Eastwood explained, allows domestic lines to be crossed with wild strains, producing varieties more resistant to diseases such as apple scab, a fungus that can devastate crops

"But these countries lack the resources to conserve their valuable trees," added Dr Eastwood.



Most popular now, in detail

This year, as part of the the UK Darwin Initiative, Fauna & Flora International is working with scientists in Kyrgyzstan to carry out research on threatened trees and develop methods to harvest the fruit sustainably.

The organisation is training local scientists and involving communities in the planning and managing of their own forests.

### http://news.bbc.co.uk/1/hi/sci/tech/8036785.stm



### Central Asia's declining fruit and nut forests (12 millures)

Thumbnail view

Environment

Endangered habitats Food Deforestation World news Kyrgyzstan

Science Plants - Biodiversity





http://www.guardian.co.uk/environment/gallery/2009/may/07/forests-conservation-central-asia-floraand-fauna?picture=347027321



http://www.treehugger.com/files/2009/05/wild-progenitors-of-domestic-fruit-nut-trees-central-asia-threatened-extinction.php



THIS WEEK S SHOW

# **Deforesting the Forbidden Fruit**

THIS WEEK'S SHOW

ABOUT LIVING ON EARTH

WHERE TO TUNE IN

LOE EDUCATION PROGRAM

TAPES & OTHER PRODUCTS

ARCHIVES

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Air Date: Week of May 15, 2009



A bowl of Central Asian fruits and nuts. (Photo: Chris Loades, FFI)

The ancestral species of many fruits and nuts we enjoy in the West are threatened with extinction in Central Asia. A recent report by Fauna & Flora International has found nearly 90 percent of the region's fruit and nut forests have been lost in the past 50 years. The conservation group's Global Trees Campaign coordinator, Georgina Magin, talks with host Jeff Young about what's at stake if the ancestral roots of the fruits we enjoy are lost forever.



Real Audio for this Story (Requires Real Player)



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Links Related to this Story

### TRANSCRIPT

YOUNG: There's nothing more American than apple pie.

But, like a lot of Americans, apples have their roots in another country—for the apple the old homeland is present day Kazakhstan. The apple is just one of many important fruits and nuts that descend from ancestral versions still found in the mountain forests of Central Asia. But a recent report by the conservation group Fauna and Flora International shows most of Central Asia's fruit and nut forests are already gone. More than 300 species are threatened with extinction.

http://www.loe.org/shows/segments.htm?programID=09-P13-00020&segmentID=5

# n in the Orchard of Ede

The ancient forests of Central Asia gave the world apples, apricots and walnuts. Now they are under threat

# By Midsael McCartby ENVIRONMENT EDITOR

IN BIBLICAL legend, it grew in the Garden of Eden. In reality, it grew wild in Kazakhstan. And now the world's original apple tree, the progenitor of all our modern apple varieties, is threatened

in a beit of forests in Central Asia – a re-gion home to more than 300 wild fruit and nut species, including plum, cher- and many other important food trees rom which domesticated varieties are It is one of nearly 50 trees, including he original apricot and the origin

thought to descend.
In the past 60 years an estimated 90 per cent of these forests have been de-Asia identifies 44tree species in Kaza-chstan, Kyngyzstan, Uzbekistan, Turk-menistan and Tajikistan as threstened many of the wild tree species they contain. The Red List of Trees of Central stroyed, and a new survey has pimpoir ed the threat to the very existence

former capital city is Almaty, which means "Father of Apples") genitor of all domestic applies in culti-vation today. (The name of Kazakhstan's Notable among them is Kazaldestan's lists from the University of Oxford have recently judged to be the genetic prowild apple, Malus sienersif, which scien

It is thought that as the wild applies were domesticated and bred, they grad-ually spread westwards down the Silk Road, the great trading highway for camel caravans which linked Asia to the Middle East and ultimately Europe, and that this process was repeated with the wild apricot, Armeniaca nulgaris, from which all the current varieties of apricot stem - 6,000-year-old apricot seeds have been discovered during gion – and the wild waben, Jugius regio.

Both of these species are now to be found on the Red List. other fruits and nuts. It happened with archaeological excavations in the re-

According to the British conserva-tion charity Fauna & Flora Internation-



People in Kyrgyzstan gather the annual walnut harvest, in the last 50 years, 90 per cent of the forests of Central Asia have been destroyed CLOADES/FFI

al (FFI), which has drawn up the list in collaboration with Botanic Gardens Conservation International, "thesefruit and nut forests have been described as a biological Eden, and have long held an important role in human culture.

The Red List identifies over-exploitation, human development, peets and and forests in the region, while a lack of financial resources and infrastruc-ture stace the break-up of the Soviet

house for wild fruit and nut trees," said Antonia Eastwood, the Red List lend author. "If we lose the genetic diversi-"Central Asiats forests are a vital store

by these forests contain, the future features on the Red Let us "undangered" security of these foods could be jeopar. — the second highest category of threat dised, especially in the face of unknown FFI is also working with local communities.

gyzstan to save and restore one of the romost highly threatment apple species identified in the report, the Niedzwet zky apple (Malus niedzwetzkyano), as the part of its Gholal Three (Umpugn. Only ull individuals of this tree are known to survive in Kyrgyzstan and the species to changes in global climate."

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tection for forest resources, including sustainable use and more effective pro

rative project is being launched in Kyr gyzstan this ywar, led by Professor, Adri To build on this work, a new collabo scientists and involve local commun ties in forest use planning.

http://www.independent.co.uk/environment/nature/death-in-the-orchard-of-eden-1681057.html







### Media Release

For immediate release

### As apples blossom in the UK their wild ancestors face extinction

Cambridge, 7 May 2009 - Several of the world's fruit and nut trees, wild ancestors of the fruits we eat today, are seriously threatened with extinction, a new 'Red List' released by tree experts warns today.

Many of these species occur in the unique fruit and nut forests of Central Asia – an estimated 90% of which have been destroyed in the past 50 years.

The Red List of Trees of Central Asia<sup>1</sup> identifies 44 tree species in Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan and Tajikistan as globally threatened with extinction. The region is home to over 300 wild fruit and nut species, including wild apple, plum, cherry, apricot, walnut and many other important food trees from which domesticated varieties are thought to originate.

Owing to the often fragmented, mountainous geography of the landscape, these plants display exceptionally high genetic diversity, which could prove vital in the development of new disease-resistant or climate-tolerant fruit varieties. This could be of huge importance to future food security as the global climate changes.

The fruit and nut forests have been described as a biological Eden<sup>2</sup>, and have long held an important role in human culture. It is believed that many of the fruit and nut trees familiar in cultivation today were domesticated from these forests, and were then distributed by people along the Silk Road long ago. For example, domestic apples are now known to be derived from the wild species *Malus sieversii* <sup>3</sup>, which is native to Central Asia and is identified as threatened in the report.

The Red List of Trees of Central Asia¹ was compiled by international scientists and published by Fauna & Flora International in collaboration with Botanic Gardens Conservation International as part of the Global Trees Campaign⁴. It identifies over-exploitation, human development, pests and diseases, overgrazing, desertification and fires as the main threats to the trees and forests in the region. Lack of financial resources and infrastructure since the break-up of the Soviet Union has also had a negative impact on the forests of the region.

Dr Antonia Eastwood, lead author of *The Red List of Trees of Central Asia*, said: "Central Asia's forests are a vital storehouse for wild fruit and nut trees. If we lose the genetic diversity these forests contain, the future security of these foods could be jeopardized, especially in the face of unknown changes in global climate."

Fauna & Flora International (FFI) is already working in Kyrgyzstan to save and restore one of the most highly threatened apple species identified in the report, the Niedzwetzky apple (or *Malus niedzwetzkyana*), as part of the Global Trees Campaign. FFI is also working with local communities and government forest services in Kyrgyzstan and Tajikistan to encourage sustainable use and more effective protection for forest resources, including providing training for community groups and grants for eco-friendly small businesses to assist local livelihoods.

To build on this work, a new collaborative project is being launched in Kyrgyzstan this year, led by Prof. Adrian Newton of Bournemouth University, UK (a co-author of *The Red List of Trees in Central Asia*) and involving Fauna & Flora International, Botanic Gardens Conservation International and several institutions in Kyrgyzstan. With funding from the UK Government's Darwin Initiative, the project will conduct research on threatened trees, provide training to Kyrgyz scientists and involve local communities in forest use planning.

Prof. Newton said: "In a year when we are celebrating the anniversary of the birth of Charles Darwin, it is a great privilege to have the opportunity to help conserve these forests, which have been of such evolutionary importance. Given their extraordinary role in human history and culture, it is hard to think of any native forests more worthy of conservation. We very much look forward to working with colleagues, both in the UK and in Kyrgyzstan, to help prevent extinction of these wild fruit and nut tree species".

### Notes to editors:

1. The Red List of Trees of Central Asia by Antonia Eastwood, Adrian Newton and Georgy Lazkov, was compiled from information from regional experts who attended a workshop in Kyrgyzstan, and subsequent research. It is published by Fauna & Flora International in collaboration with Botanic Gardens Conservation International (BGCI) as part of the Global Trees Campaign. The report is produced under the auspices of the Global Tree Specialist Group of the International Union for the Conservation of Nature (IUCN) Species Survival Commission (SSC). The region concerned covers Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan and Tajikistan. The report is available to download from <a href="https://www.globaltrees.org">www.globaltrees.org</a> – a Russian version will be available shortly.

2. In his critically acclaimed book *Wildwood* (2007), the late Roger Deakin referred to this region as "Eden". He also described the tale of the *Malus sieversii* — of its origins, propagation along the Silk Road, then dispersal to the rest of the world — as "a cross between the Book of Genesis and the *Just So* stories: How the apple began".

3. *Malus sieversii* has recently been judged to be the genetic progenitor of all domestic apples in cultivation today, by scientists from the University of Oxford (see Barrie Juniper and David Mabberley, 'The Story of the Apple', Timber Press, 2006).

4. The Global Trees Campaign, a partnership between Fauna & Flora International, Botanic Gardens Conservation International and many other organisations around the world, aims to save threatened tree species through provision of information, conservation action and support for sustainable use. See <a href="https://www.globaltrees.org">www.globaltrees.org</a>

### Further information:

For further information, interviews or high-resolution images, please contact:

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### About Fauna & Flora International (FFI) (www.fauna-flora.org)

FFI protects threatened species and ecosystems worldwide, choosing solutions that are sustainable, based on sound science and take account of human needs. Operating in more than 40 countries worldwide – mainly in the developing world – FFI saves species from extinction and habitats from destruction, while improving the livelihoods of local people. Founded in 1903, FFI is the world's longest established international conservation body and a registered charity.

### About Botanic Gardens Conservation International (BGCI) (www.bgci.org)

BGCI is the world's largest plant conservation network, linking over 600 botanic gardens in over 120 countries in a shared commitment to biodiversity conservation, sustainable use and environmental education. BGCI mobilises botanic gardens and works with partners to secure plant diversity for the well-being of people and the planet. BGCI provides the Secretariat for the IUCN Global Tree Specialist Group that is responsible for compiling information on the conservation status of trees worldwide.

### About Bournemouth University (www.bournemouth.ac.uk/conservation/)

In the recent Research Assessment Exercise (RAE), Bournemouth University recorded one of the largest improvements in research performance in the UK. The ranking means that BU is now in the top ten for research amongst the UK's new universities – those institutions which have become universities since 1992. The Centre for Conservation Ecology and Environmental Change is one of the research centres within the University, and undertakes internationally recognised research on environmental change and its impacts on biodiversity. It is also a leading provider of education and training in conservation science.

# B B C NEWS

### Wild fruit trees face extinction

By Victoria Gill Science reporter, BBC News

The wild ancestors of common domestic fruit trees are in danger of becoming extinct, scientists have warned.

Researchers have published a "red list" of threatened species that grow in the forests of Central Asia.

These disease-resistant and climate-tolerant fruit trees could play a role in our future food security.

But in the last 50 years, about 90% of the forests have been destroyed, according to conservation charity, Fauna & Flora International.

The Red List of Central Asia identifies 44 tree species in Kyrgyzstan, Kazakhstan, Uzbekistan, Turkmenistan and Tajikistan as under threat from extinction.

It cites over-exploitation and human development as among the main threats to the region's forests, which are home to more than 300 wild fruit and nut species including apple, plum, cherry, apricot and walnut.

Antonia Eastwood, the lead author of the research, described the region as a "unique global hotspot of diversity".

"A lot of these species are only found in this area," she told BBC News. "It's very mountainous and dry, so many of these species have a great deal of tolerance to cold and drought.

"A lot of our domestic fruit supply comes from a very narrow genetic base," she continued. "Given the threats posed to food supplies by disease and the changing climate, we may need to go back to these species and include them in breeding programmes."

### Farming fruit

Kazakhstan and Kyrgyzstan are thought to be the ancestral homes of familiar favourites such as Red Delicious and Golden Delicious.

The US Department of Agriculture has already sponsored expeditions to Kazakhstan, during which scientists have collected samples with the aim of expanding the genetic diversity of farm-grown apples.

This type of genetic foraging, Dr Eastwood explained, allows domestic lines to be crossed with wild strains, producing varieties more resistant to diseases such as apple scab, a fungus that can devastate crops.

"But these countries lack the resources to conserve their valuable trees," added Dr Eastwood.

This year, as part of the the UK Darwin Initiative, Fauna & Flora International is working with scientists in Kyrgyzstan to carry out research on threatened trees and develop methods to

harvest the fruit sustainably.

The organisation is training local scientists and involving communities in the planning and managing of their own forests.

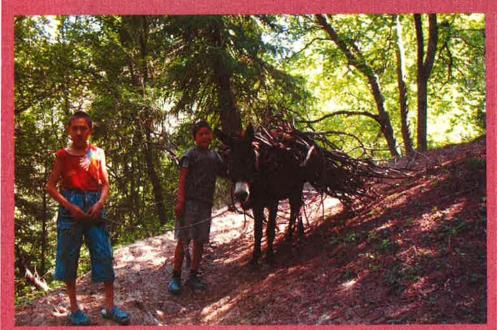
Story from BBC NEWS: http://news.bbc.co.uk/go/pr/fr/-/1/hi/scl/tech/8036785.stm

Published: 2009/05/07 09:18:28 GMT

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# **CONSERVING EDEN**

# PARTICIPATORY FOREST MANAGEMENT IN THE TIEN SHAN REGION OF KYRGYZSTAN



Gathering fuelwood in the walnut forest

yrgyzstan lies at the heart of the internationally important biodiversity hotspot formed by the mountains of Central Asia. Featuring a variety of land forms, rock types and climatic conditions over a wide altitudinal range, this hotspot is home to an immensely rich diversity of animal and plant life. Especially in the Tien Shan region of the Kyrgyz Republic, broadleaved forests form unique ecosystems predominantly composed of walnut (Juglans regia). In these walnut forests, a number of other fruit/nut bearing trees and shrubs occur, including species of apples, pears, cherries, plums, apricots and almonds. The walnut forests have always been of vital importance to the livelihoods of the people living in the region as a source of firewood, timber and food. They also provide grazing grounds for livestock, and the under-storey pasture is cut for hay. Although an important source of income for rural communities, unsustainable rates of harvesting pose a tremendous threat to the forests. The recently published Red List of Trees of Central Asia identifies more than 40 species as globally threatened with extinction, including a number of wild fruit and nut bearing trees and shrubs.



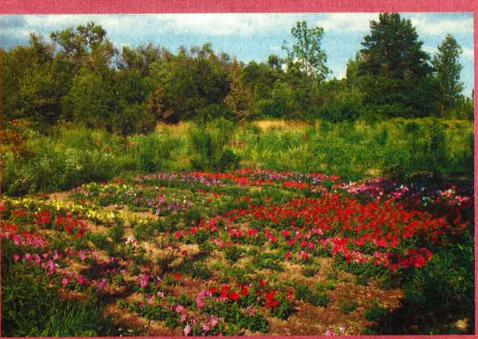


Bishek Botanical Garden

### The project

In a new 3-year project funded by the Darwin Initiative, BGCI is working with Kyrgyz scientists and international experts from Bournemouth University and Fauna and Flora International to strengthen national and local capacity for the participatory management of the walnut tree forests in the Tien Shan region. As part of the project, surveys are being undertaken to assess the distribution of threatened fruit and nut tree species throughout their range in Kyrgyzstan. These will be integrated with

Prunus sodoiana



Bishek Botanical Garden





May 8, 2009

## Death in the Orchard of Eden

By Michael McCarthy, Environment Editor

The ancient forests of Central Asia gave the world apples, apricots and walnuts. Now they are under threat

In Biblical legend, it grew in the Garden of Eden. In reality, it grew wild in Kazakhstan. And now the world's original apple tree, the progenitor of all our modern apple varieties, is threatened with extinction.

It is one of nearly 50 trees, including the original apricot and the original walnut, which have become endangered in a belt of forests in Central Asia - a region home to more than 300 wild fruit and nut species, including, plum, cherry, and many other important food trees from which domesticated varieties are thought to descend.

In the past 50 years an estimated 90 per cent of these forests have been destroyed, and a new survey has pinpointed the threat to the very existence of many of the wild tree species they contain. The Red List of Trees of Central Asia identifies 44 tree species in Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan and Tajikistan as threatened with extinction.

Notable among them is Kazakhstan's wild apple, Malus sieversii, which scientists from the University of Oxford have recently judged to be the genetic progenitor of all domestic apples in cultivation today. (The name of Kazakhstan's former capital city is Almaty, which means "Father of Apples".)

It is thought that as the wild apples were domesticated and bred, they gradually spread westwards down the Silk Road, the great trading highway for camel caravans which linked Asia to the Middle East and ultimately Europe, and that this process was repeated with other fruits and nuts. It happened with the wild apricot, Armeniaca vulgaris, from which all the current varieties of apricot stem - 6,000-year-old apricot seeds have been discovered during archaeological excavations in the region - and the wild walnut, Juglans regia. Both of these species are now to be found on the Red List.

According to the British conservation charity Fauna & Flora International (FFI), which has drawn up the list in collaboration with Botanic Gardens Conservation International, "these fruit and nut forests have been described as a biological Eden, and have long held an important role in human culture".

The Red List identifies over-exploitation, human development, pests and diseases, overgrazing, desertification and fires as the main threats to the trees and forests in the region, while a lack of financial resources and infrastructure since the break-up of the Soviet Union has also had a negative impact.

"Central Asia's forests are a vital storehouse for wild fruit and nut trees," said Antonia Eastwood, the Red List lead author. "If we lose the genetic diversity these forests contain, the future security of these foods

could be jeopardised, especially in the face of unknown changes in global climate."

Owing to the often fragmented, mountainous geography of the landscape, the genetic diversity these plants display is exceptionally high, and could prove vital in the development of new disease-resistant or climate-tolerant fruit varieties. FFI is already working in Kyrgyzstan to save and restore one of the most highly threatened apple species identified in the report, the Niedzwetzky apple (Malus niedzwetzkyana), as part of its Global Trees Campaign. Only 111 individuals of this tree are known to survive in Kyrgyzstan and the species features on the Red List as "endangered" - the second highest category of threat.

FFI is also working with local communities and government forest services in Kyrgyzstan and Tajikistan to encourage sustainable use and more effective protection for forest resources, including providing training for community groups and grants for eco-friendly small businesses to assist local livelihoods.

To build on this work, a new collaborative project is being launched in Kyrgyzstan this year, led by Professor Adrian Newton of Bournemouth University, which will conduct research on threatened trees, provide training to Kyrgyz scientists and involve local communities in forest use planning.

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