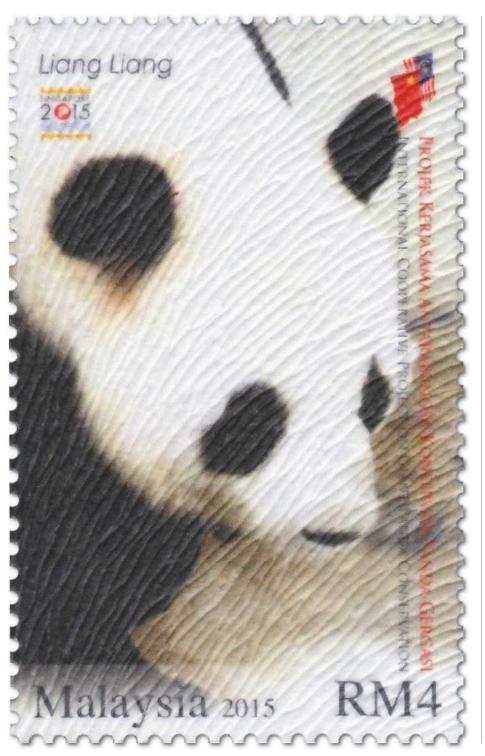
Feel it, smell it, hear it, taste it

Stamps on the themes of conserving biodiversity and tackling climate change have used many strategies in recent years. Be ready to have all of your senses engaged!

Report by Indraneil Das and Genevieve V A Gee



Postage stamps are a powerful tool for advocacy, and have long been used to promote ideas and nunderstanding, from political propaganda to public information.

For example, there have been important campaigns on health issues, from the eradication of malaria to the fight against Covid-19, and messages to raise awareness of social issues, such as the promotion of cultural diversity.

In recent years the conservation of nature and protection of the environment have become much more common themes in philately, from highlighting endangered flora and fauna to tackling global warming.

Stamps on such topics tend primarily to target worldwide thematic collectors, who may be attracted by the beauty of the designs as well as by the importance of their message. But they also benefit from gaining wider publicity, so they are increasingly using a multisensory strategy.

Stimulating more than a single sense has been shown to enhance learning and engagement. Visual, tactile, olfactory, auditory and gustatory inputs can help to educate people on complex interdisciplinary topics.

So the postal authorities of a number of nations have employed the senses of sight, touch, smell, hearing and even taste to highlight issues such as conservation and climate change in increasingly innovative ways.

We present a selection of the finest examples.

LEFT: 4r stamp from Malaysia's 2015 International Cooperative Project on Giant Panda Conservation miniature sheet, printed on flocked paper to mimic the fur of a panda

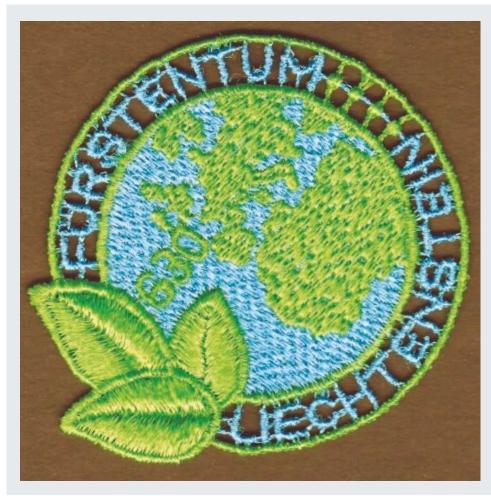
See it: recycled paper South Africa 2010

Recycling not only allows resources to be obtained at a fraction of their original manufacturing and environmental cost, but typically leads to a reduction in pollution.

For the International Year of Biodiversity (designated by the United Nations) in 2010, South Africa issued a miniature sheet printed on recycled paper.

The four stamps, at the small registered letter rate, depicted a selection of flora and fauna: the giant African mantis and common lionfish; the common chameleon and argus reed frog; the black rhinoceros and red-billed oxpecker; and the lilac-breasted roller and baobab tree.





See it: recycled plastic Liechtenstein 2020

It has been estimated that more than 10 million metric tonnes of plastic may be released annually into the world's oceans. Symbolic of this waste material is polyethylene terephthalate (PET), used in the manufacture of fibres, bottles and containers, which can kill many marine species when ingested.

To draw attention to the dangers of plastic pollution, Liechtenstein's PET Recycling stamp of 2020 was made of this very material. It was embroidered from recycled polyester thread, derived from 3,100 recycled bottles.

The near-circular, self-adhesive €6.30 value, coloured blue and green, shows an embroidered globe and leaves.

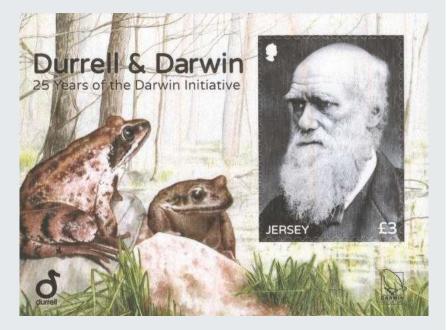
See it: sustainable wood Jersey 2017

Harvesting timber in a sustainable way is crucial to protecting the world's ecology, and is overseen by the Forest Stewardship Council, an international non-profit organisation promoting responsible management of forests.

In 2017, Jersey drew attention to this work by issuing a miniature sheet printed on FSC-certified sycamore wood.

The issue marked 25 Years of the Darwin Initiative, a UK Government programme that assists countries with poor financial resources to meet their objectives in preserving biodiversity.

The £3 stamp portrays Charles Darwin, who is credited with the theory of evolution. It also gives a nod to another British naturalist, Gerald Durrell, as the Durrell Wildlife Conservation Trust has worked alongside the Initiative to save species from extinction.



See it: burning sun New Zealand 2015

Global warming inspired the release of the Being SunSmart stamps in New Zealand's Children's Health series in 2015. Specifically, the four designs provided guidance on the prevention of melanoma (skin cancer), which can be caused by exposure to ultraviolet radiation. They supported the 'Slip, Slop, Slap & Wrap' public information campaign, advising people to slip on long-sleeved shirt, slop on sunscreen, slap on a hat and wrap their eyes with protective sunglasses.

The printing of the miniature sheet's border is photochromic. The white and yellow umbrella in the margin turns purple and green when exposed to bright sunlight.

NEW ZEALAND

The face values of \$0.80, \$1.40, \$2.00 and \$0.80 each carried a 10c surcharge, with the proceeds going to a prominent children's health charity.

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Smell it: scent of roses Bhutan 1973

Bhutan is known for its philatelic innovations, pioneered by the American entrepreneur Burt Todd, and the Himalayan nation produced the world's first aromatic stamps as early as 1973.

They depicted varieties of roses on six values, four for local mail and two for airmail, with the aroma of the flowers incorporated into the printing ink.

The varieties illustrated were Iceberg, Pink Parfait, Roslyn, Blue Moon, Marchioness of Urguijo and Wendy Cusson.

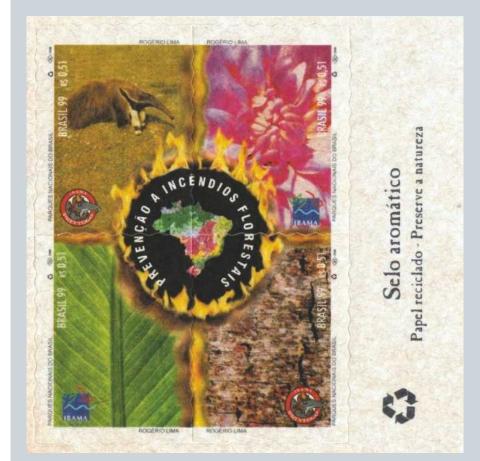
Stanley Gibbons does not give these stamps catalogue numbers but lists them in an appendix.







Smell it: burning forest Brazil 1999



Brazil's miniature sheet of four self-adhesive stamps entitled Prevention of Forest Fires, issued in 1999, used impregnated scent to dramatic effect.

In the country which encompasses the majority of the Amazon rainforest, it drives home an awareness of the dangers of fire by smelling of burnt wood.

The Amazon rainforest is the largest on the planet, with an unparalleled biodiversity of animals and plant species.

The four 0.51r designs show a giant anteater, a flower, a leaf and a burnt tree trunk, and the design makes them appear to be burning from the inside.

'The Amazon is the largest rainforest on the planet, with an unparalleled diversity of species'

MULTISENSORY CONSERVATION STAMPS

Touch it: desert sand Morocco 2010

Desertification, caused by the over-exploitation of soil, deforestation and climate change, threatens many nations in northern Africa, southern Europe and Asia.

In 2010, Morocco issued a miniature sheet of two 7.80d stamps with real sand from the Sahara embedded in them.

The issue celebrated the 35th Anniversary of the Green March, not a conservation event but a mass demonstration to persuade Spain to cede control of the Spanish Sahara to Morocco.





Touch it: tree seed UAE 2011

A genuine attempt to highlight the increasing problem of desertification was made by the United Arab Emirates, with the

'Desertification can be caused by the overexploitation of soil, by deforestation or simply by climate change'

issue of a Protect Our National Heritage miniature sheet in 2011. A 1d value illustrates the leaves of a ghaf tree, which grows in arid regions of Asia and can survive extreme drought. A 4d value is embedded with fibre and seed from a real tree.

The ghaf is the national tree of the Emirates. The government operates a Give A Ghaf campaign, which encourages citizens to plant trees in their gardens to combat desertification.



Touch it: water conservation South Africa 2013

Few stamp issues have moving parts, but one spectacular example is the International Year of Water Cooperation miniature sheet from South Africa in 2013.

The circular sheet has an upper layer of cardboard, which can be turned around its axle to reveal any of the five stamps (at the bottom), along with information on its theme (at the top).

All of the five stamps are for international mail, and are in the shape of a water droplet. One each represents human consumption, biodiversity, agriculture, industry and the South African government's Working For Water programme.

The biodiversity stamp illustrates the Clanwilliam redfin, an endemic fish threatened by water extraction and competition from invasive species, and the mauve bluet damselfly, rescued from extinction by the removal of invasive plants from riverbanks.

SLAND 100

SLAND 130

Touch it: volcanic ash Ecuador 2013

'Lonesome George' a male Pinta Island giant tortoise, was the sole representative of his subspecies in Ecuador's Galápagos Islands for many years, and therefore became a poster boy for wildlife conservation efforts.

After his death in 2012, at the estimated age of 102, Ecuador issued a stamp as a memorial to George in 2013, and volcanic ash was embedded on the face of the \$3 value to provide a feel of the geological features of his homeland.

Pinta Island (also known as Abingdon Island) is an active volcano which last erupted in 1928, when George was a teenager.

The population of giant tortoises declined due to hunting by humans from the 17th century, and habitat loss in the 20th century, as the introduction of feral goats decimated the vegetation.



Touch it: melting ice Iceland 2009

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One estimate predicts a 10°C rise in average temperature in the polar regions this century due to global warming, and the melting of ice and rising sea levels could have catastrophic consequences.

In a joint issue with Chile and Finland, entitled Preserve Polar Regions & Glaciers, Iceland produced a thermochromic miniature sheet in 2009.

One stamp shows Iceland

and the other the North Pole, in a composite design in which the border is a map of the entire Arctic region, with the polar ice cap shaded in pink.

But when warmed by human touch, the image is transformed. The ice 'melts', revealing the severely limited extent of the ice cap which is predicted by the year 2100.



Touch it: panda fur Malaysia 2015

Saving the giant panda from extinction is perhaps the world's most famous wildlife conservation challenge. Its numbers declined in the wild due to loss of habitat in its native China, and captive breeding programmes have had limited success.

In 2015, Malaysia issued a miniature sheet, comprising two 4r stamps, to commemorate the International Cooperative Project on Giant Panda Conservation, a joint venture with China.

As part of an intergovernmental agreement, a pair of giant pandas were given on a breeding loan by Beijing to Kuala Lumpur in 2015, and so far they have produced three cubs (and attracted a large number of visitors) at Zoo Negara.

The miniature sheet is printed on flocked paper which, when rubbed, is redolent of fur.

MULTISENSORY CONSERVATION STAMPS

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Hear it: birdsong Netherlands 2016

Until recently, stamps with an audio element sounded like pure fantasy, but augmented reality (AR) technology has changed that.

The largest series of 'talking' stamps to date has come from the Netherlands in 2016, by way

of a semi-official set of no fewer than 74 domestic-rate values, entitled Birds of the Netherlands.

Scanning the barcode at the base of any stamp, using a

specially developed digital reader pen, redirected you to a website that played the call of the respective bird. Illustrated here are the robin and the sparrowhawk.

'Birdsong is often an indicator of a healthy eco-system, and has been at the centre of several philatelic experiments with augmented reality'

roodborst



Taste it: sea salt Slovenia 2013

Slovenia has only a short stretch of coastline on the Adriatic Sea, but it is proud of its diverse marine fauna and the traditional activity of salt harvesting.

These elements were combined in a set of three stamps and a miniature sheet issued in 2013, which illustrated sea life and had sea salt from the Piranske Soline works applied to the front of the stamps using thermography.

Thus, the stamps taste of salt. They were not the world's first flavoured postage stamps, but they stand out from the others which, predictably, tend to relate to the theme of gastronomy.

The 60c, 64c, 92c and 97c values depict the damselfish, the common cuttlefish, the loggerhead sea turtle and the golden grey mullet.



Hear it: birdsong Gibraltar 2019

Birdsong is often an indicator of a healthy eco-system, and several postal administrations recognised this by producing stamps with an augmented-reality bonus for the Europa theme of 2019, which was National Birds.

The result of this international project was that users could play the song of the bird depicted on the design by scanning the image using the special CEE app.

One example was the issue from Gibraltar, with its two £1.66 stamps illustrating the Barbary partridge. ■

THE AUTHORS

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