



**for a
sustainable
future**



Population Matters Magazine

Issue 29 Summer 2016

Water shortages to affect billions

**What does Brexit say about
attitudes to population?**

London set to grow by 1.2 million

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About Population Matters

Population Matters is a membership charity working towards a global population size that can provide a good standard of living, a healthy environment and environmental sustainability. Our activities comprise education, research and policy promotion. We are funded by our members, donations and grants and receive no funding from official or commercial bodies. We welcome new members. Members receive our publications and can take part in our activities. Active members can apply to become guarantor members and vote at our Annual General Meeting. Membership fee rates are available on our website; we are grateful to those who contribute higher fees, donations or legacies. We have a wide range of promotional items available, including clothing, greetings cards and briefing sheets. Please visit our website www.populationmatters.org to see the full range.

Until 2011, Population Matters was known as the Optimum Population Trust, which remains our registered name. We are a registered charity (no.1114109) and a company registered in England and Wales (no. 3019081). Registered office: 135-137 Station Road, London E4 6AG.

Magazine

This magazine is printed using vegetable-based inks on 100 per cent recycled paper. If you are willing to receive the magazine by email, which reduces our costs and helps the environment, please contact the Finance and Membership Manager.

Additional copies are available on request; a donation is appreciated. Population Matters does not necessarily endorse contributions nor guarantee their accuracy. Interested parties are invited to submit, ideally by email, material to be considered for inclusion, including articles, reviews and letters. Subjects may include the causes and consequences of, and cures for, unsustainable human population and consumption levels. Submissions should be in Word or equivalent and be accompanied by a brief description of the writer. Publication titles should be shown in italics and a single space used after full-stops. Copy deadlines are **20 June and 20 December** and a maximum of 700 words per contribution is requested. Submissions may be edited and the editor's decision is final. Please note that it may not be possible to include all submissions.

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The roots of mass migration

Simon Ross, Chief Executive



Those voting for Britain to leave the European Union in June's referendum had various motives. However, it is generally accepted that a primary reason was concern over the historically high level of net migration (immigration less emigration).

Based on opinion polls, immigration has been for some time the issue of most concern to the UK public. This is not solely a question of culture, religion or race. Rather, voters are concerned about such issues as housing affordability, access to education and healthcare, and transport congestion. It is thus fundamentally a concern about Britain's rising population size, as successive opinion polls commissioned by Population Matters have shown.

This concern has a factual basis. On the day of the referendum, it was announced that the UK population had risen by half a million in the 12 months to summer 2015. In May this year, official projections were that the populations of the East of England and the South East will rise by one fifth in the next 25 years, while that of London will rise by over a quarter. Much recent growth has been driven by migration from the poorer accession states of Eastern Europe and from southern Europe with its currently high levels of unemployment. These flows may slacken as these economies develop and recover.

Public concern, though, is reinforced by the wider global picture.

Just days before the referendum, the United Nations reported that a record 65m people globally were either refugees, asylum seekers or internally displaced, an increase of 5m in just a year. These dry figures translate to the persistent suffering and frequent fatalities of those seeking to enter Europe from Africa and the Middle East.

The proximate cause of migration may often be conflict. However, underlying that conflict is usually population pressure. Consider the growth in the population in the last 65 years of countries from which people are mainly driven: Afghanistan – four times, Syria – five to six times, and Iraq – six to seven times. Much of sub-Saharan Africa faces similar trends. Developmental optimists may have hoped that advances in industry and agriculture would match such growth with increases in production. In practice, there is persistent unemployment, lack of opportunities and grinding poverty – a recipe for instability. Moreover, there are emerging issues of water availability, climate uncertainty and other constraints on food production.

That population issues are rising so strongly up the public agenda seems somewhat appropriate in the year of the 250th anniversary of the birth of Thomas Robert Malthus, for which we obtained some media coverage, and our own 25th anniversary as an organization. Our comments on official UK population estimates and projections, promoted by our PR agency and members locally, have been widely quoted in the media. In meetings, journalists and members of parliament have been interested in what we have to say. We have refreshed our promotional materials, available free from our online shop, and issued an increasing number of briefings and comments, available on our website, on how population pressures connect with the issues facing the public and policymakers. In the coming year, we are planning to take advantage of this more favourable climate with an increasing use of original campaigns intended to influence public opinion by connecting population and sustainability with the issues affecting people today.

Finally I would like to end this piece by welcoming our new Chair, Andrew Macnaughton and acknowledging the huge contribution of our departing Chair and first President, Roger Martin. (See appreciation.)

Giving women choices in Guatemala

John Charnock-Wilson

Millions of women worldwide lack access to appropriate, affordable and consistently available contraception. PopOffsets is helping to bring family planning services to some of these women, by providing grants to charities across the globe.



Ana Antonieta

19-year-old Ana Antonieta (pictured) is amongst the many women who have benefited from a PopOffsets grant. Ana visited a WINGS mobile clinic in Morelia, a village in the Western Highlands of Guatemala. Morelia is quite remote, so Ana had previously struggled to access family planning information or contraception, leading to her giving birth to two children at a relatively young age.

Like many other women in her community, when given the opportunity Ana opted for the highly reliable Jadelle contraceptive implant, which will enable her to avoid another pregnancy for five years.

PopOffsets provided WINGS with a grant of £5,000, which has helped the charity to acquire a second mobile unit, and to strengthen the medical support team by hiring a gynaecologist and nurse practitioners. At least nine mobile clinics are now being held across Guatemala each month, and WINGS has been able to extend their reach from four to 12 provinces.

Young women under 20 are offered free advice and contraception at the mobile clinics. In Guatemala, over half of women become pregnant before they are 18, often because they have no access to contraception.

At a recent mobile clinic in San Pedro Limón, a 12 year old girl arrived with her husband. Although the Guatemalan Congress raised the legal age of marriage from 14 to 18 in 2015, child marriage remains widespread in many rural impoverished communities.

It is often quite difficult to reach these child brides in order to ensure that, at the very least, they have access to information and services to enable them to delay high-risk pregnancies. The Mobile Unit Coordinator spoke to the girl and her husband about the risks she could face if she got pregnant so young, and provided contraceptive counselling.

Along with offering family planning advice and contraception, the clinics are able to carry out cervical cancer screening, and provide immediate treatment for precancerous cells.

Family planning charities around the world need your help to reduce unintended pregnancies. Please support them by donating to PopOffsets: www.popoffsets.org

Legacy giving: Pass it on

Population Matters is a member of Remember A Charity, a consortium of more than 150 charities. Remember A Charity raises awareness of the importance of making a will, and offers advice about leaving gifts to charitable organizations.

Population Matters is participating in Remember A Charity in Your Will Week, 12-18 September. This year's theme is 'legends pass it on'. One way to 'pass it on' and help us celebrate our 25th anniversary is by considering including us in your will, after taking care of any loved ones. Your gift could help to ensure that Population Matters can continue to educate, campaign and raise awareness about environmental sustainability, population and consumption concerns for the next 25 years and beyond.

For more information, or to let us know that you have remembered us in your will, please see: www.populationmatters.org/take-action/join-or-donate/leave-gift-will, call 020 8123 9116, or email julie.lewis@populationmatters.org.

Thank you.



Roger has had two careers: as a diplomat in Africa, Asia, the United Nations and Middle East, resigning 'in fury' as a Deputy High Commissioner; and as an environmentalist. The latter career path has included roles as Director of Somerset Wildlife Trust, national Trustee and South West Regional Chair of the Campaign to Protect Rural England, and the founder 'green' representative on the South West Regional Assembly. He was the founder Chair of the Sustainable Somerset Forum, the South West regional Biodiversity Action Plan, and the South West regional Water Framework Directive committee. Roger has also been the Secretary of State's representative on the South West Environment Agency's flood defence and environmental pollution committees, the Regional Agriculture Panel and the National Park Authority.

"As a diplomat in Africa and Asia, I saw plenty of evidence of the damaging impact of rapidly growing populations both on poor women and on the environment," says Roger. "It was only when I resigned and became an environmentalist in Somerset, however, that I experienced the 'mad taboo'. At all the worthy green quangos and NGO bodies to which I was appointed, I started to point out that all our problems got harder with ever more people and suggested that we said so. The response was always the same. Everyone would stare at their papers; after a short pause the Chairman would move on; and then over coffee lots of them would tell me how glad they were I had raised it. When I asked why they hadn't supported me, they would change the subject! Increasingly exasperated by this, I joined Population Matters as soon as the late, great Willie Stanton told me of it in the early '90s."

In his time as chair of Population Matters, Roger put the main focus on campaigning, supported by research and education. As an insider remarked, at the time he became Chair, board meetings were still held in someone's living room.

Roger Martin: Appreciation of his term as Chair

Simon Ross, Chief Executive

As Roger Martin steps down as Chair of Population Matters after over seven years at the helm, it seems an appropriate time to celebrate his achievements and activities with us, although he will continue to make an active contribution as our first President.

Under his leadership, activity has increased markedly, supported by significant increases in membership and income. Highlights, amongst many, include:

- increase in the number and activity of our patrons;
- formation of an alliance of European population concern groups and the joining of a number of other campaign alliances;
- increase in the lobbying of the United Nations, politicians, the media and civil society;
- increase in activity in schools and universities;
- redesign and expansion of the website;
- move into social media;
- engagement with celebrities and third party local groups;
- development of a merchandizing range;
- launch of an online shop;
- placing of London bus and underground advertising;
- production of several videos;
- commissioning of opinion polls;
- sponsorship of PopOffsets; and
- engagement of additional personnel and a public relations agency.

Roger has played a leading role in our research activity, commissioning the seminal *Fewer Emitters, Lower Emissions, Less Cost* paper, which went viral in 2009 and helped establish the population/climate change link. He has also spoken on population at conferences in more than 20 countries and many more times in the United Kingdom, including broadcast interviews and challenging debates (all at no cost to Population Matters).

His background in the environmental and conservation movement and long association with our organization has helped ensure that we stay true to our vision and mission. Aided by his experience as a diplomat, he has skilfully managed the disagreements inevitable within any organization and successfully represented us in his contacts with other organizations and prominent individuals. On a personal note, I have appreciated his advice and support in my role. Thank you, Roger.

In his letter to the Board, Roger said: "I have now been Population Matters' Chair for over seven years and, having turned 75, I've decided that the time has come to stand down. I shall always remain a committed supporter of Population Matters."

Patron published

One of our patrons, Professor John Guillebaud, has recently had an article published by the medical journal *The BMJ*. The article, entitled *Voluntary family planning to minimise and mitigate climate change*, examines the relationship between population and the environment, noting that:

"[Population growth] is usually... treated as a 'given', something to be measured and (hopefully) adapted to, not as something that is sensitive to policy intervention. This is analogous to monitoring a bucket that is filled from a running tap and, when it's close to overflowing, discussing complex measures to make the only available bucket larger, rather than turning off the tap."

The article can be read in full on The BMJ's website: www.bmj.com/content/353/bmj.i2102

2016 AGM and Conference

Our Annual General Meeting and Conference will be held in central London on Saturday 8 October 2016. Attendance is free and you can attend just one or both parts of the day.

The AGM in the morning will include a report on finances and membership, any resolutions, election of board members by the guarantor members, and presentation of the Jack Parsons and Population and Sustainability Awareness Awards. In the afternoon conference, attendees will be able to hear a talk on 'Countering population denial' by Diana Coole, Professor of Political and Social Theory at Birkbeck, University of London, and a speech reflecting on our 25 year history by former chair, Val Stevens. Chief Executive, Simon Ross, will present our annual review and plans, following which there will be an opportunity for member engagement and discussion.

Members for whom we have an email address will be sent an online booking form. If you do not receive the online booking form by mid September, you may book using the form enclosed with this magazine. We look forward to seeing you there.

The journal of population and sustainability

The first issue of Population Matters' new journal of population and sustainability was published in August.

The journal aims to act as an interdisciplinary hub for researchers to share their work on the relationship between human numbers and environmental issues. Through the journal, we hope to raise the profile of the consequences of population pressure on the environment and to establish a community of academics and others working in the field. We aim to publish twice a year.

The first issue features papers from former Director General of the International Planned Parenthood Federation, Steven W. Sinding, and Population Matters patron Aubrey Manning, considering the general state of the population movement from a historical and personal perspective. We also have

a paper from the philosopher Sarah Conly (who recently appeared on BBC Radio 4's *Moral Maze*'s examination of 'population control') putting the moral case for single child families. Additionally, we have a paper examining the links between climate change, conflict and migration in the Middle East, and another analysing the UN's world population projections and their influence on policy. The journal also features summaries of projects carried out by LSE MSc students sponsored by Population Matters.

Please visit www.populationmatters.org to download your copy.

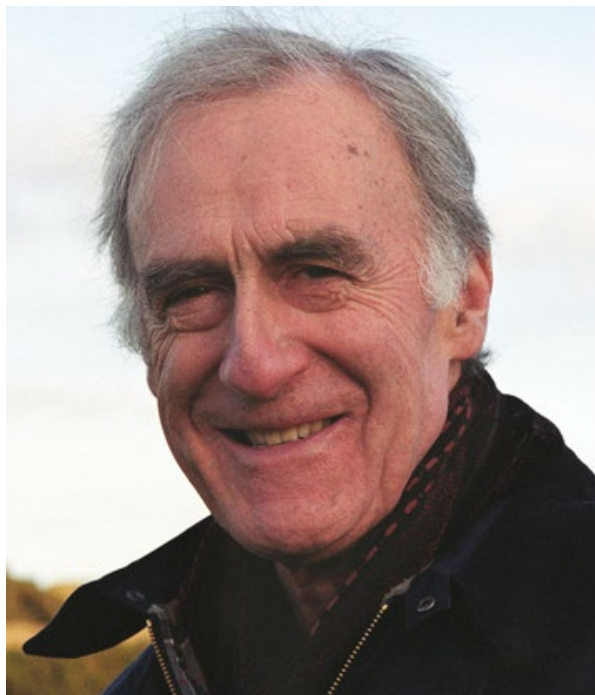
Film: London Crawling

In February, we launched a short film titled *London Crawling – Talking About Population*. Passers-by were asked for their experiences of living in a crowded city. London's population is 8.5 million, with an additional 1.2 million inhabitants expected in less than ten years. Amongst the concerns respondents reported were high housing costs, overcrowded trains and a struggling health service.

The film is part of our ongoing work to draw attention to the effects of population growth. It can be viewed on our YouTube channel: www.youtube.com/populationmatters

Interview with a patron: Aubrey Manning

Population Matters patron Aubrey Manning is Professor Emeritus of Natural History at the University of Edinburgh. He was named Goodwill Ambassador for the UN International Year of Planet Earth, and was president of the Royal Society of Wildlife Trusts for several years. Here Professor Manning speaks to Kate Duggan about the need for a shift in public attitudes.



When did you first realize the link between environment and population?

Probably when I started as a biologist in the 1950s. Biologists tend to notice the changes. There was a period of rapid recovery after the war, which brought huge advantages, but one could see that the amount of disturbance and development that was going on was putting a bit of a brake on some aspects of wildlife. It struck me that human numbers was a key factor.

We are becoming so successful at death control, and, understandably, no one has any resistance. If you offer someone a pill and say: "Take this and you won't die," everyone's going to take it; it doesn't matter if you're a Buddhist, Muslim, Christian or Jew. But birth control is much more difficult to sell than death control.

However, there is still huge unmet demand for contraception in poorer countries and it is tragic that still this is being neglected or opposed.

People still don't seem to make the connection between the number of children they have and the problems with housing, environmental degradation and so on that they see around them.

Net migration is very high, but even if you took that out of the equation, we're still increasing quite rapidly in population in Britain. Most surveys indicate that the majority of people think Britain is already overcrowded, but they still don't make the connection. Too many may still consider: "Well we've had two children, what about a third?" Especially if the first two are the same sex.

We're a rich, well-educated country, and if we could recognize that we can't carry on growing, well that's a powerful message to get across to the rest of Europe and, eventually, the rest of the world.

I would be content just to get to step one: getting governments, the civil service, the Home Office and so on to recognise that *numbers matter*. The Office for National Statistics is predicting that, by 2027, we'll have reached 70 million. At the moment we just say: "It's going to happen and we have to predict and provide," but that's totally inadequate. You have to ask: "Is this what we want? Are there alternatives?" and there certainly are alternatives. You have to start pushing people to have fewer children and I don't think that will be difficult if we explicitly get across the idea that Britain is full up. But at the moment, it's a taboo subject.

It seems difficult enough to get people to recognize that they should use energy efficient lightbulbs, let alone that they should have fewer children than they might want.

At least the government is telling us that we ought to use energy efficient lightbulbs. We need to get to the point where they're telling us that one ought to have no more than two children. We're a long way from that yet.

I don't wish the world to be ruled by biologists, but more biological input is required. To have ourselves run by economists, military men and lawyers, is not enough.

How do you think the public's attitude towards population concern has changed over the years?

A number of things have happened. There is an increasing perception that Britain is getting more crowded, and there are all these worries about employment, housing, education, access to open spaces and all that. There is education about the ecological situation of the world. Climate change has attracted all this attention. People are starting to realize that, when it comes to carbon emissions, individual people who are 'emitters' are also a factor, not just energy efficient lightbulbs.

The press is starting to approach Population Matters for comments on things in the news. This is admirable, exactly what we want.

So there are some changes. It can't come quickly enough, but I'm not totally pessimistic on the matter. I do fear that things will have to get worse before they can get better though.

Let's hope not. I have two young children.

You've got to be able to look your children in the eye and think: "What kind of a world am I providing for you?" A common response to population concern is that it's 'anti-human'. That's grotesque – it's *pro-human* – how else are we to ensure that our children can grow up into a world that has choice and opportunities? You will be labelled fascist, racist, anti-human, but my back is broad, they can call me what they like!

You have to be a short term optimist, otherwise you wouldn't get up in the morning. It is still a beautiful world.

Is there anything else you would like to share with readers that we haven't covered?

As members of Population Matters you're showing your concern. Always point out those connections between numbers and all the things we're interested in: conserving a beautiful countryside on a planet which has to support us. Think globally, it is a global issue, but act locally. We must recognize that human numbers count. It isn't just a matter of ending poverty, improving education, the role of women: all of those are important, but they won't be sufficient if we don't tackle the numbers.

An article by Aubrey Manning entitled *Population and Sustainability: the Most Inconvenient Truth* can be found in our Journal. Please visit www.populationmatters.org to download your copy.

Celebrating 25 Years: Looking back and looking forward

Christina Sexton, Development Coordinator

This year, Population Matters is celebrating our 25th anniversary. We have come a long way since our founding in 1991 as the Optimum Population Trust.

We have had many achievements, including attracting such prominent patrons as Sir David Attenborough and Dame Jane Goodall, expanding membership to 3,000, and reaching out to thousands more people through our newsletter and social media. We have built positive research relationships with the London School of Economics and Political Science and Lancaster University and are working to develop more strategic outreach to university campuses in order to engage the next generation. We have increased media coverage, alliance memberships, lobbying of politicians, and speaking at events and conferences. Population Matters has grown in size, reach, income, and influence in the past 25 years, and we are committed to continuing to raise concern about population and sustainability over the next 25 years.

As part of our celebrations, we have been asking members for their views on the importance of population sustainability and their hopes for change for the next 25 years.

Here are some of their responses:

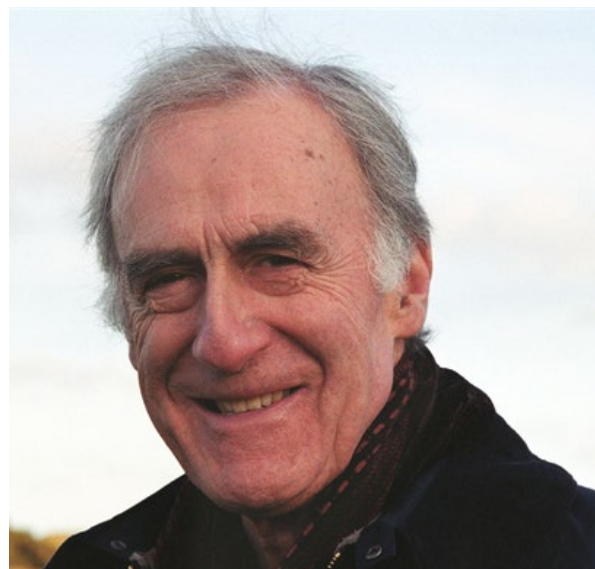
“My concern goes back to my medical student days, when I decided that with respect to the future of ALL LIFE on the planet, family planning was the most important specialty in medicine. I therefore ensured I got higher training in both surgery and gynaecology so as to become a specialist in this field for both genders. [My hopes for change over the next 25 years are that] humanity finally listens to the wake-up calls by myself and others over many decades – and by Population Matters/OPT since 1991 and,

since 1994, my own Apology to the Future project (www.ecotimecapsule.com) – to stabilize and then reduce, not only the mean size of our collective footprints, but also the ‘number of feet’ making those footprints.”

John Guillebaud, former Chair

“At the moment the mind-set in Britain is extremely pro-natalist; you read in the papers about celebrities having all these babies. We need to get across the idea that fertility has to be under control. It’s so ridiculous that at the moment if a woman says she doesn’t want a child she’s regarded as selfish, an outcast, a pariah! We need to recognise that populations have been growing for centuries; it’s about time they started declining, sustainably. We don’t want to have a fast decline.”

Aubrey Manning, Patron



“The future of humankind depends on one simple insight: that there can be no just and truly sustainable world unless we urgently prioritize investment in non-coercive family planning, and keep on doing so until our population stabilizes and then starts to decline. That insight is as true now as when I started out with the Green Party 40 years ago.”

Jonathon Porritt, Patron



“When I became acting chair in 2001, my main concern was the destruction of the natural world. It still is. We need to educate the public about the interdependence between our species and all others. As members of the education group, we believe this should start with children.”

Edmund Davey, Former Chair and member of the Education Group

“In the 25 years that I’ve been involved with Population Matters, world population has massively increased, so that feels like failure. But at least the issues of population growth and environmental impact are now discussed openly – the taboo seems to be crumbling, so that feels like success.”

Valerie Stevens, Former Chair

“With some 2 billion more people than 25 years ago, it is even more obvious that the more we are, the more we degrade our life-support system, and the smaller each person’s share of our dwindling natural resources. Getting these simple facts across to people, and killing off the ‘mad taboo’ on recognizing them, is more important than ever.”

Roger Martin, President



If you would like to share your thoughts on the importance of population sustainability and your hopes for change, please email Elisabeth at Elisabeth.tencate@populationmatters.org. If selected, we will feature your quote on our website and social media.

Additionally, as part of our 25th anniversary, we want to say a heartfelt thank you to everyone who has supported us over the years and those who support us today. It is your support and involvement that enables us to continue to do what we do. We hope you will continue to support us over the next 25 years, and we look forward to working together towards a more sustainable future.

We have set ourselves a goal to raise a further £25,000 for additional campaigning by the end of this anniversary year. If you would like to help us reach this goal, please visit www.populationmatters.org/donate. To find out about other ways to get involved, please contact Elisabeth at the address above.

Spotlight on a team member: Graham Tyler, Shop Manager

Graham is responsible for distributing the materials and resources which are stocked in our online shop. These include T-shirts, Season's greetings cards and a range of free promotional items, such as posters, leaflets and postcards.



Graham Tyler, Shop Manager

Why did you decide to get involved with Population Matters?

I originally watched a BBC *Horizon* episode in which Sir David Attenborough demonstrated population to be a key concern. I suppose that I felt that common sense of impotence, in which the affairs and direction of the world appears so much greater than the ability of any individual to influence.

I might not be able to influence the world by myself, but I can support a charity and a group of people who have organized themselves to do just that, and hence I started to support Population Matters. There would eventually be an email asking if anyone could help with the management of materials, and I volunteered.

It is an enormous pleasure to be able to support and work with a group of people who do so much to try to improve the world situation.

The shop is a team effort, including Simon Ross, Julie Lewis and Amanda Katz, as well as many others.

What do you think the key issues are that need tackling in order to reach a sustainable population size?

I hope you don't mind me altering a well-known quote: "Humans can always be trusted to do the right thing, after exhausting every other possibility." We have seen significant and vital changes in attitude that have had substantial benefits. An obvious example is the car

seat belt. According to *The Independent* newspaper: "It remains the most successful contribution to safety in the history of motoring." And yet convincing motorists to use the device was an astonishingly prolonged struggle. Nils Bohlin thought: "We are too lazy to put effort into saving our own lives." Changes in attitude happen, but even when the cause is obvious and rational argument is difficult to deny, the effort to convince appears monumental.

I suspect that you need more than a logical argument, but you DO need a logical argument. You also need a creative mechanism that finds a way to resonate with an audience. I was really impressed with Population Matters' use of the YouTube *Zombie Apocalypse* analogy. I thought it was humorous, gripping and expressed a simple point. Additionally, on the release of the figures from the Office for National Statistics, Population Matters captured the opportunity wonderfully. Not only did we help to ensure the media ran with the story, but also that the stories highlighted concerns that continue to resonate with the public.

How would you like to see the shop grow over the next few years?

I am excited to see how the material evolves and extends the influence of the charity. We need to continue offering an array of regularly updated promotional materials, which help to achieve the goals of the charity and support our members.

Visit our shop online: population-matters.myshopify.com



126 miles for us all

Eric Stevens has been a member of Population Matters for almost a decade. This year, he has completed the London Marathon and RideLondon-Surrey 100, raising more than £1,000 to support our work. However, as he explained to Christina Sexton, perhaps his greatest success has been in raising awareness.

Why do you support Population Matters?

Almost every major issue is made worse through overpopulation and mindless consumption. While the Universe's resources have a lot to offer, for the moment we humans are confined to Earth and her resources are severely overtaxed. I support Population Matters specifically because its efforts to research, document and educate in these areas are without peer. I believe people change when they are presented with the facts and given the opportunity to do the right thing. Population Matters is helping to present these facts.

Why did you decide to run and cycle for Population Matters?

Mostly so I had an excuse to continually raise these issues with my friends, family and colleagues! I believe passionately in mindful family planning and

consumption, and constantly seek opportunities to raise awareness about them. Running a marathon and then completing a 100 mile cycling sportive isn't something I do frequently. It gave me a chance to say: "Look, I'm putting my body through the wringer and committing a lot of time to these endeavours because I believe so much in the cause. So take a look." The money I've raised for Population Matters is, of course, very important and I'm pleased to have exceeded my personal goal in that regard. However, I was especially moved by people sending me private notes of encouragement about these great and very important causes. That's the real win.

If you'd like to participate in a future run or cycle event on behalf of Population Matters, please contact Elisabeth at elisabeth.tencate@populationmatters.org.

Sir David Attenborough

2016 marks the 90th birthday of one of our best known patrons, Sir David Attenborough. Campaign Coordinator Elisabeth ten Cate takes a look back over an illustrious career.



Born on 8 May 1926 in Isleworth, Sir David Attenborough grew up unaware of the invention that would later allow him to share his journeys and passions with millions of people worldwide.

With television out of the picture, it was the countryside and books by wildlife expert Ernest Thompson Seton that inspired him. His father, an academic who specialized in Anglo Saxon culture, encouraged the young David to follow his passions and to immerse himself in the pursuit of knowledge. In 1945, Sir David made his way to Cambridge to study geology and zoology on a scholarship. Seven years later, he applied for a radio producer vacancy, but was instead offered a position as a producer in the television department.¹

In 1954, Sir David produced *Zoo Quest*, a programme that went on to become the most successful wildlife programme of its time in Britain. Attenborough originally did not plan to present at all. “I appeared by accident really,” he said in a recent birthday interview with Kirsty Young: “because the man from the zoo, Jack Lester, became very ill.” What followed was a series of memorable television moments, including the catching of a Javanese python “with great difficulty and considerable alarm.”

Between 1965 and 1974, Sir David was the controller of BBC2, developing programmes including *Civilisation* and *The Ascent of Man*. It was not until the 1979 production of *Life on Earth*, however, that Attenborough truly became a household name. The now famous sequence where Sir David mingled with gorillas was voted the 12th greatest TV moment of all time in 1999.² It not only showed the species in a positive light but also characterized much of Sir David’s understanding of mankind and its destructive implications for wildlife:

“...it seems really very unfair that man should have chosen the gorilla to symbolize everything that is aggressive and violent, when that is the one thing that the gorilla is not — and that we are.”³

Sir David Attenborough’s impact has been huge. The gorilla sequence is seen as the inspiration for a highly successful conservation story, as the total gorilla population grew from 250 then to more than a thousand today. Though busy as ever with the production of wildlife television series, Attenborough’s influence today reaches far beyond the screen. In 2011, he was invited to give the RSA’s President’s Lecture. In 2015, he discussed with President Barack Obama the future of the planet and, in 2016, he was named the greatest Londoner

of all time and had a polar research ship named after him.^{4,5} This is along with being awarded numerous honours, including the Order of Merit, Order of the Companions of Honour and Fellowship of the Royal Society. In spite of his busy schedule, Sir David has, since 2009, generously acted as one of Population Matters’ patrons.⁶

“The growth in human numbers is frightening. I’ve seen wildlife under mounting human pressure all over the world, and it’s not just from human economy or technology. Behind every threat is the frightening explosion in human numbers. I’ve never seen a problem that wouldn’t be easier to solve with fewer people – or harder, and ultimately impossible, with more.”⁷

We benefit hugely from having such a spokesperson: whenever Sir David chooses to address the adverse implications of unlimited population growth, we see our membership numbers grow. President Obama remarked during their 2015 conversation that the current generation seems to be more environmentally aware than preceding generations. Agreeing with that observation, Sir David said that young people care: “They actually believe that humanity, the human species, has no right to destroy and despoil regardless. They feel that very powerfully.”⁸

Hearing those words from someone who has spent so much time teaching about life and nature, and who has consistently said that we should develop greater sympathy for living creatures, truly gives hope that mankind is finally starting to learn. We would like to thank our patron Sir David Attenborough for his positive legacy, insights and support and to celebrate his enduring passion and productivity.

¹ Unless mentioned otherwise, quotations and information have been taken from: Bobin, V. (Director). (2016, May 8). Attenborough at 90 [Video file]. Retrieved May 27, 2016, from <http://www.bbc.co.uk/iplayer/episode/p03qxjzj/attenborough-at-90>

² 100 greatest TV moments. (1999). Retrieved May 27, 2016, from <http://www.itnsource.com/en/shotlist/ITVProgs/1999/09/11/Y09150001/?s=100> Greatest

³ O’Connell, S. (2006). Gorilla action: Attenborough looks back at the Rwanda gorillas. Retrieved May 27, 2016, from <http://www.independent.co.uk/environment/gorilla-action-attenborough-looks-back-at-the-rwanda-gorillas-6104747.html>

⁴ ‘Boaty McBoatface’ polar ship named after Attenborough. (2016). Retrieved May 27, 2016, from <http://www.bbc.co.uk/news/uk-36225652>

⁵ 20 of the greatest Londoners of all time - do you agree? (2016). Retrieved May 27, 2016, from <http://www.lifedeathprizes.com/lists/greatest-londoners-of-all-time-47512>

⁶ Happy 90th birthday to Sir David Attenborough! (2016). Retrieved 2016, from <http://www.populationmatters.org/happy-90th-birthday-sir-david-attenborough/>

⁷ Cook, M. (2009). David Attenborough frightened by population growth. Retrieved May 27, 2016, from http://www.mercatornet.com/demography/view/david_attenborough_frightened_by_population_growth/

⁸ Whitehouse. (2015). Sir David Attenborough and President Obama: The Full Interview. Retrieved May 27, 2016, from <https://www.youtube.com/watch?v=NzUJ2ZGyvBI>

Water, water everywhere

Elisabeth ten Cate, Campaign Coordinator

Around one billion people in developing nations currently lack access to clean drinking water and 2.7 billion people face water scarcity for at least one month per year.¹ By 2025, it is expected that around two thirds of the world population will be experiencing water scarcity. The majority of those affected will live close to the equator.²

Only 2.5 per cent of water on earth is suitable for human use. Derived from glaciers, aquifers, rivers and lakes, fresh water for a long time appeared to flow in abundance, but its scarcity is quickly becoming one of the biggest global problems.³ Paul Ehrlich, professor of population studies and patron of Population Matters, captures the severity of the problem eloquently: “Overdrafts on aquifers are one reason some of our geologist colleagues are convinced that water shortages will bring the human population explosion to a halt. There are substitutes for oil; there is no substitute for fresh water.”⁴

Population growth is a major, though not the only, cause of the increase in demand for water. As the

world population has tripled in the past century, water consumption has increased six-fold.⁵ Large quantities of water are lost between the process of extraction and usage. For example, 70 per cent of all water worldwide is used for agriculture⁶ and, due to poor quality irrigation systems, much of this evaporates or seeps away.⁷ Industry currently uses 20 per cent of all consumed water, but this share is expected to grow as more countries urbanize and industrialize.⁸ The US wastes seven billion gallons (31,800 mega litres) of water every day, and the UK chronically over-abstracts between 1,100 and 3,300 mega litres of water from its rivers and aquifers.⁹

As increased urbanization clusters people in one location, it concentrates water demand on a particular area. Often such areas do not naturally have enough water to meet such needs. At the same time, problems with waste disposal and pollution – both hugely problematic in urban areas – affect the quality of accessible water adversely and contribute to environmental issues, exacerbating scarcity.^{10,11}

Climate change causes less predictable rainfall patterns and glacial shrinkage, creating a vicious cycle of water problems and environmental degradation. More than ever, areas like the Atacama Desert in Chile hardly experience rainfall, while parts of India drown in rain. Such extremities are not exclusive to the developing world: California's landscape is parched following four years of drought, while the UK experiences more instances of flooding.^{12,13} Moreover, much of the water currently consumed comes from underground aquifers which are being drained much more quickly than they are being replenished, while in coastal areas, loss of groundwater can mean sea water incursion, affecting water quality.

Polluting behaviours worldwide, as well as climate change and careless consumption in the developed world, do not just cause problems for mankind. For years, buffalos have been prowling villages in Burkina Faso, seeking water amid the drought. Many wetlands have dried out since the 1900s; consequently, many species have lost their natural habitats and even more have seen their staple foods disappear.¹⁴ Marine life has also suffered greatly from the pollution of rivers and seas.¹⁵

We can change our attitude towards water. Technology can help us to optimize irrigation systems and make industries less water dependent.^{16,17} We can invest in desalination installations, fix leaking pipes, adopt drip irrigation techniques, develop large scale transfer methods to replenish dry areas, reduce waste generation and adopt more sustainable lifestyles. Mindful choices,

including consuming less meat and buying less cotton, will also save a lot of water. However, many of these proposals are expensive and limited. While reducing water usage per head is a good start, it is only one side of the story. The total number of people using water is an equally important variable. Population stabilization is the only measurement that can keep that value in check. Thus, only when population growth reduces or reverses will mankind be able to enjoy reliable water supplies in the long term.

¹ WWF (2016). Water Scarcity. Retrieved May 30, 2016, from <http://www.worldwildlife.org/threats/water-scarcity>

² FAO (2009). Water Scarcity. Retrieved May 30, 2016, from <https://www.youtube.com/watch?v=XGgYTcPzxE>

³ FAO (2009). Water Scarcity. Retrieved May 30, 2016, from <https://www.youtube.com/watch?v=XGgYTcPzxE>

⁴ Coley, D. A. (2008). Energy and climate change: Creating a sustainable future. Chichester, West Sussex: John Wiley.

⁵ <https://www.rt.com/news/176828-world-water-crisis-2040/>

⁶ Water consumed this year (million of liters). (2016). Retrieved May 30, 2016, from <http://www.worldometers.info/water/>

⁷ Annex I: Irrigation efficiencies. (n.d.). Retrieved May 30, 2016, from <http://www.fao.org/docrep/t7202e/t7202e08.htm>

⁸ Water consumed this year (million of liters). (2016). Retrieved May 30, 2016, from <http://www.worldometers.info/water/>

⁹ Less, S. (2011). Untapped Potential. Retrieved May 30, 2016, from <http://www.policyexchange.org.uk/images/publications/untapped-potential-j-caps?ul11.pdf>

¹⁰ Hoornweg, D., Bhada-Tata, P., & Kennedy, C. (2013). Environment: Waste production must peak this century. Retrieved May 31, 2016, from <http://www.nature.com/news/environment-waste-production-must-peak-this-century-1.14032>

¹¹ <http://www.conserve-energy-future.com/sources-and-causes-of-water-pollution.php>

¹² Population growth exacerbates flood risk. (2016). Retrieved May 31, 2016, from http://www.populationmatters.org/documents/population_growth_exacerbates_flood_risk.pdf

¹³ California's Drought. (n.d.). Retrieved May 30, 2016, from <http://www.cbsnews.com/pictures/californias-drought/>

¹⁴ WWF (2016). Water Scarcity. Retrieved May 30, 2016, from <http://www.worldwildlife.org/threats/water-scarcity>

¹⁵ Greenpeace (2006). Plastic Debris in the World's Oceans. Retrieved May 30, 2016, from http://www.greenpeace.org/austria/Global/austria/dokumente/Studien/meere_Plastic_Debris_Study_2006.pdf

¹⁶ Renewable & Non-Renewable Energy Sources - Conserve Energy Future. (n.d.). Retrieved May 30, 2016, from <http://www.conserve-energy-future.com/causes-effects-solutions-of-water-scarcity.php#jority>

¹⁷ 6 Solutions to the Water Shortage Crisis. (2015). Retrieved May 30, 2016, from <http://www.triplepundit.com/2015/06/innovative-solutions-water-shortage-crisis/>

Funding to improve education and avoid child marriage

The U.S. Global Strategy to Empower Adolescent Girls was launched earlier this year. The strategy includes \$40 million to help girls access and remain in secondary school in developing countries. An additional \$7 million will help to change perceptions about child and forced marriage in Afghanistan.

Protection of the Green Belt at stake

More than 275,000 new properties are scheduled to be built on Green Belt land in the UK, despite the government's proclaimed commitment to preserving this land from urban sprawl. High housing targets mean that local authorities are relying on the 'exceptional circumstances' clause to release Green Belt land for new development. The figures were released following research undertaken by the Campaign to Protect Rural England.

Subnational population projections

Elisabeth ten Cate, Campaign Coordinator

The UK's Office for National Statistics (ONS) has published its latest subnational population projections for England. These provide population size and age estimates for regions and local authorities, and are used to help plan the provision of local services.¹

The projections indicate that all English regions are likely to increase in population size over the next decade and quarter of a century. The populations of London, the East of England and the South East are projected to grow faster than the national average.² By 2024, approximately 1.2 million additional people are expected to be living in London. To put this into perspective, London's population looks set to grow by the same number of people who are currently living in Leeds and Sheffield combined.³

The growth is in part caused by natural change. We live longer and healthier lives and this life expectancy increase means that society both ages and grows. It is expected that there will be a 20 per cent increase in the number of people aged 65 and over by 2024. Net migration, especially to London, is also expected to play a significant role. Net migration increases actual numbers, and also affects birth rates.

England will face many challenges if both the projected 3.9 per cent increase in natural change and the 3.6 per cent growth in net migration become reality by 2024. This includes the need for 880,000 extra school places in the upcoming decade and a potential NHS funding gap of more than £30 billion. To create awareness of the importance of the projections, Population Matters released briefings and set up a media campaign, successfully securing coverage and interviews both locally and nationally.

¹ Unless otherwise stated information has been taken from Statistical bulletin: Subnational population projections for England: 2014-based projections. (2016). Retrieved May 26, 2016, from <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/subnationalpopulationprojectionsforengland/2014basedprojections>

² ONS population projections England. (2016). Retrieved May 26, 2016, from <http://www.populationmatters.org/document/s/ONS-projections-Regions-and-Local-Authorities.pdf>

³ The UK's 200 largest towns, cities and districts. (n.d.). Retrieved May 26, 2016, from http://www.citymayors.com/gratis/uk_topcities.html

Sexual and reproductive health education

The United Nations Population Fund (UNFPA) aims to 'deliver a world where every pregnancy is wanted, every childbirth is safe and every young person's potential is fulfilled'. With this goal in mind, UNFPA is working with governments to improve sexual and reproductive health education. Recent initiatives include a Cambodian television and radio show designed to entertain viewers while educating them on sexual and reproductive health, gender equality and healthy relationships. In Bhutan, 150 nuns have received training in sexual and reproductive health and human rights. They are sharing their knowledge with their communities through informal talks and group learning sessions. In The Central African Republic, which has the world's second highest maternal death rate, UNFPA is helping to train health counsellors and strengthen the health-care infrastructure.

New briefing paper on the demographic dividend

Population Matters has published a briefing paper on the demographic dividend – the accelerated economic growth that a country can achieve when the proportion of its population that is of working age is greater than the proportion of its population that doesn't work.

The briefing reveals that in order to achieve this economic growth, countries with rapidly-growing populations need: low fertility rates; a healthy and educated population; female participation in the labour force; a positive investment climate and appropriate infrastructure. The briefing can be downloaded from our website: www.populationmatters.org/resources/briefings-submissions.

DEVELOPING REGIONS

More than 1 in 8 married women want to avoid pregnancy but are not using any contraceptive method.

WHY?



| | | | |
|--------------------------------------|--------------------------|---|-----------------|
| Side effects/ health risks 26% | Infrequent sex 24% | Breastfeeding/ postpartum amenorrhea 20% | No access 5% |
|--------------------------------------|--------------------------|---|-----------------|

The unmet need for contraception in developing countries

Sexually active women in developing countries who have an unmet need for contraception, meaning they wish to avoid pregnancy but are not using any contraceptive (traditional or modern), generally cite one of several key reasons for not using a method, according to a new report published by the Guttmacher Institute.

The report, *Unmet Need for Contraception in Developing Countries: Examining Women's Reasons for Not Using a Method*, is based on research conducted by Gilda Sedgh and colleagues.

Findings show that the most common reasons married women with unmet need cite for not using a method are concerns about side effects and health risks (26%), and the belief that they have sex too infrequently to warrant use (24%). A large share say that they are breastfeeding or have not resumed menstruation since their last birth (that is, they have postpartum amenorrhea) (20%). In contrast, the inability to access contraceptives is a relatively uncommon reason for non-use (5%). Overall, sexually active never-married women with unmet need cite reasons similar to those cited by married women for non-use, although many also say they don't use contraceptives simply because they are "not married."

Using data from Demographic and Health Surveys conducted in 52 countries (32 in Africa, 13 in Asia and seven in Latin America and the Caribbean) between 2005 and 2014, the researchers were able to analyze married women's reasons for not using contraception as well as trends in reasons over time. They were also able to analyze the reasons for non-use among sexually active never-married women in 31 of those countries (23 in Africa, seven in Latin America and the Caribbean, and one in Asia).

In 21 of the 52 countries studied, married women with unmet need most commonly cite concerns about side effects and health risks as a reason for contraceptive non-use. The growing prevalence of this reason among married women across regions and cultures suggests that these concerns are related to contraceptive methods and women's shared experiences with them. Overall, this reason is less common among sexually

active never-married women, with only 19% of them citing it as a reason for non-use, compared with 26% of married women.

One-third of married women with unmet need in Asia cite infrequent sex as a reason for not using contraception, and in Africa, one-fifth do so. In 12 countries, this is the most commonly cited reason among married women. Yet about half of the women citing infrequent sex as their reason for non-use were sexually active within the past three months, which suggests that many women in this group may be underestimating their risk of becoming pregnant.

Among sexually active never-married women with unmet need, infrequent sex is the most common reason given for non-use (cited by 41%), followed by the reason "not married" (29%). Women may give the latter reason because they are not having sex regularly or they believe it would be socially unacceptable for them to obtain contraceptives, or because family planning providers deny contraceptive services to unmarried women.

"It is essential that family planning providers offer women and couples contraceptive counselling that includes accurate information about potential side effects and how to address them," said Gilda Sedgh, principal research scientist at the Guttmacher Institute and the study's lead author. "Moreover, providers should ensure that all women – married and unmarried – are able to choose from a wide range of contraceptive options so that they can select a method that best suits their needs. It is equally crucial that women are given the opportunity to switch methods if the first contraceptive they try doesn't end up working for them."

In 12 countries, breastfeeding, postpartum amenorrhea or both is the most commonly cited reason for not using contraception among married women. Eleven of these countries are in Africa, where fertility rates are high and prolonged breastfeeding is common, and where this reason is reported more commonly than in other regions. However, many of the women citing this reason for non-use may have incorrect perceptions about not needing contraception: Fewer than half of them meet the criteria for lactational amenorrhea as protection against pregnancy. This means that a large share of those citing this reason are underestimating their risk of becoming pregnant, unless they are practicing postpartum abstinence.

Overall, one in 10 women aged 15–49 in developing regions wish to avoid a pregnancy but are not using any contraceptive method. Addressing their reasons for non-use should inform family planning programmes' efforts to satisfy this need. The authors suggest a range of possible responses to address each reason for non-use. These include improving counselling that addresses specific concerns – real and imagined – about side effects and health risks; ensuring women are informed about their fertility and pregnancy risk; and helping women choose contraceptive methods that are most appropriate for the types of relationships they have.

This article was first published on the Guttmacher Institute website. The full report, *Unmet Need for Contraception in Developing Countries: Examining Women's Reasons for Not Using a Method*, can be downloaded from www.guttmacher.org/report/unmet-need-for-contraception-in-developing-countries.

Obituaries

John Charles (Jack) Caldwell, 1928 - 2016
Bob Douglas, Terry Hull and Peter McDonald



Jack Caldwell was the author of 25 books, 128 book chapters and 139 journal articles. A 2009 survey of nearly 1,000 demographers worldwide named him the most influential researcher of all time in the demographic field. Caldwell shared most of

his research career with his anthropologist wife of 60 years, Rosie (Pat) Caldwell.

Caldwell's seminal work included documentation of the role of mothers' education in fertility limitation. He is particularly noted for his 'wealth flows' theory, which relates demographic transition theory to changes in intergenerational transfers within the family.

Caldwell received recognition both at home in Australia and overseas. In 1985, the Population Association of America presented him with its highest prize, the Irene Taeuber Award for excellence in demographic research. In 1994, he began an elected four-year term as President of the International Union for the Scientific Study of Population (IUSSP) – the peak international body for demography – and in 2004 he was presented with the United Nations Population Award. He was made an Officer in the General Division of the Order of Australia in 1994 and received the Australian Centenary Medal in 2001.

Jack Caldwell was born in the suburb of Canterbury, Sydney. His first academic appointment was at the University of Ghana (1962-64). This early experience began a lifelong interest in Africa and produced his first two books.

He was appointed as a staff member of the Department of Demography of the Australian National University (ANU) and took leave from that post to work with the Population Council in New York and with the University of Ife, Nigeria. The family returned to Australia in 1970, where Jack took up the Headship of the Department of Demography at the ANU.

Caldwell initiated the first major Australian sample survey of marriage, fertility and contraception, and played a pivotal role in the development of the World Fertility Survey (WFS). He was instrumental in the creation of the International Population Dynamics Program and the Masters Degree in Demography at ANU.

Caldwell stepped away from the ANU Demography Department at the end of 1988 and became Acting Director of the National Centre for Epidemiology & Population Health (NCEPH).

An international conference entitled 'The Continuing Demographic Transition' was held in 1996 to mark Caldwell's retirement. Oxford University Press published a volume drawing together many of the threads of his academic contributions. An endowment was established at ANU to honour his work.

Jack was a humble and unassuming man with an adventurous mind and an abiding commitment to a better understanding of human behaviour.

Please note that the obituary can be read in full on the IUSSP's website: <http://iusp.org/en/jack-caldwell-1928-2016>

Edwin Barry, 1945 – 2016

Official obituary previously published by the Population Institute in Washington, DC

The Population Institute honours the passing, and celebrates the life, of a dear colleague, Edwin Barry, who passed away after an extended illness. Ed, who received the Institute's Lifetime Achievement Award last year, worked for the Population Institute for six years (2009-2015) and was the founder and director of its Sustainable World Initiative (SWI). He brought tremendous energy and vision to everything he did.

As Director of SWI, he became an internationally recognized leader on sustainability, and worked tirelessly to educate the international community about the true dimensions of the global sustainability challenge and what will be required to meet it. He was active in the UN processes leading up to the Rio +20 Summit on Sustainable Development that was held in

Rio De Janeiro in June of 2012 and the adoption of the Sustainable Development Goals (SDGs) by the UN's General Assembly in 2015. Building upon his earlier work as Chief Operating Officer for the Global Footprint Network, Ed was also the designer and creator of the Sustainable Living Planner, an interactive, educational tool that allows policymakers, students and the general public to understand the concept of sustainability and the metrics for measuring it in over 150 countries.

He will be sorely missed by his family, friends, and colleagues. Contributions in memory of Edwin Barry and his work on sustainability can be sent to the Population Institute.

Award for founder of Women Deliver

The International Center for Research on Women has awarded Jill Sheffield the 2016 Champion for Change Lifetime Achievement Award, in honour of her "enduring dedication to women's reproductive rights and lasting contributions to the improvement of maternal health." Sheffield is the founder and president of Women Deliver, an international advocacy organization that galvanizes action for girls and women, specifically regarding their sexual and reproductive health and rights. In an interview following the award, Sheffield stated: "We know that the sure-fire way to prevent maternal death is contraception, and the best shot at increasing contraception is education. Yet keeping girls in school requires sanitation services, economic stability in families and ending the culture of child marriage."

Unprepared for a risky future

Population growth and urbanization could put 1.3 billion people at risk from flooding by 2050, according to a new report by The World Bank. John Roome, World Bank Director for Climate Change, stated: "With climate change and rising numbers of people in urban areas rapidly driving up future risks, there's a real danger the world is woefully unprepared for what lies ahead."

IDC launches Sustainable Development Goals Report

The International Development Committee (IDC) has launched its report on the UK implementation of the Sustainable Development Goals (SDGs). Having contributed to the creation of the publication, Population Matters was invited to attend the event at Westminster Hall. In a packed assembly room, Stephan Twigg MP spoke of the necessity of a cross-governmental approach and stressed the need for global cooperation. Though we welcome these words, the continued growth in global population makes the implementation of the SDGs significantly more challenging.

Teen pregnancy

The rate of teen pregnancy in England and Wales is continuing to fall, according to the Office for National Statistics (ONS). There were 23 conceptions per 1,000 15- to 17-year-old girls in 2014, compared to a high of 55 per 1,000 in 1971.

Reviews

The New Worlds of Thomas Robert Malthus. Alison Bashford and Joyce E. Chaplin

Princeton University Press, 2016
ISBN: 978 0691164199

Matthew Nayler

From New England's colonial settlements Malthus calibrated his geometrical ratio; to James Cook's New Holland speculation 'by what means the inhabitants of this country are reduced to such a number as it can subsist' he sought answers.

Here, Alison Bashford (New Hollander) and Joyce Chaplin (New Englander) examine how Malthus used the 'new worlds' to analyse the 'Principal of Population' in contemporary hunter-gatherer, colonial and island societies.

Much is made of Malthus's failure to critique West Indies' slavery; sensitivities over family plantation ownership are suggested. Perhaps, but the authors fail to show how such a diversion would have demonstrated the 'Principle of Population', Malthus's professed aim (contra Africa, where he duly dived in), preferring to frame the book as a general economic history of the world, which it wasn't. The claim that sugar held a central place in the contemporary British diet is wrong – it is estimated to have accounted for under 4 per cent of the average daily intake in 1800.

The authors chart Malthus's evolving views on emigration, perhaps overstating the extent of his supposed 1820's enthusiasm. Malthus ignored emigration in his Principles of Political Economy of 1820; left the 1826 edition of the Essay unchanged from the 1817 version and remained ambivalent in the Summary View of 1830.

New Worlds corrects details where Malthus erred and shows how much of the big picture he got right. But his omissions suggest the new worlds didn't matter quite as much to Malthus as the authors contend.

On the Survival of Humanity. Risteárd Mulcahy

Liberties Press, Dublin, 2016
ISBN: 978-1-910742-42-6

Peter Slater

Risteárd Mulcahy is a distinguished Irish cardiologist, who has written extensively on that subject and on various others. Now in his 90s, he has turned his attention to the future of the human race and produced this short book.

The book starts with a brief description of life, as he thinks it will be, for a man living in the Irish countryside in 2050. Houses are creeping out along the motorways, bicycles and horses have replaced cars and there is little public transport, people are growing much of their own food, wildlife is almost totally absent.

This is a plausible, if very bleak scenario, for some stage in the future, though it takes little account of human ingenuity and suggesting that it might materialize so soon does seem very pessimistic.

The rest of the book amounts to only 29 pages, but alludes briefly to almost all the big problems facing us, most notably population increase and environmental degradation. The book is not referenced and, in places, digresses to talk of topics clearly dear to the author but not strictly relevant, such as the dangers of smoking. He has clearly been deeply concerned about where we are heading for some time, and quotes letters he has written to the press and the Irish President, which have led to a frustrating lack of action. He thinks we are in denial and calls for all sorts of ways we should change things to face the future. Many of these would require concerted international action and strong constraints on the behaviour of individuals. But is it too much to hope that a Pope who appears so enlightened about ecology and environment might change the Catholic Church's outrageous attitude to contraception?

I share much of Mulcahy's pessimism for our long term future, but think he does not come to grips with the really big brake on effective action. The recent climate change meetings have shown just how difficult it is to get nearly 200 countries to agree about anything and, even within countries, many political systems were devised in altogether more leisured times and ill-equipped to cope with rapidly accelerating change. Human beings are clever and flexible, but it remains to be seen whether they are clever and flexible enough. Quite a challenging and stimulating little book then, and one that would make an excellent subject for discussion groups.

The Biosphere Prophecy and the Doomsday Scenario. Tamsin Orr-Walker

Self-published, 2016
ISBN: 978-0-473-34616-4

The Biosphere Prophecy and the Doomsday Scenario is an adventure book for children aged 10 and up. It focuses on a group of friends who have been tasked with saving the planet from mankind's excesses.

The author is calling on readers to help save the planet themselves by taking on their own missions, including spreading the word about overpopulation.

Jane Blank

As a teacher of English to 11-18 year olds, I am always on the lookout for fresh reading material to challenge and stimulate my pupils. I enjoyed *The Biosphere Prophecy...* myself and will thoroughly recommend it to pupils who are good readers, both male and female, aged 11-13.

It ranges over three continents, has a magic triangle of interesting, gifted and eccentric teenage protagonists and lots of action. It is truly challenging in terms of the scientific ideas it discusses and the technologies it explores. I loved the quotes at the beginning of each chapter and enjoyed the portrayal of the parents!

Even the inevitable magic was easy to accept and I soon grew to be fond of the unusual pet...

There are rumours of other books in the series which I await enthusiastically. Our school library will be buying copies of this book, I will be recommending it to my colleagues and lending out my own copy to my pupils.

Caitlin Swenson Year 7, Ysgol Gyfun Gwynllyw school, South Wales

The story centres on three teenagers from different parts of the globe who are thrown together by the accidental discovery of a governmental file. This file has important information about the world's destruction, which could have fatal consequences for the entire planet.

Armed with their talents and special powers it is up to them to show the world this information so the world can be saved. The story starts slowly as the characters are introduced, but soon develops into a fast paced adventure!

The three main characters are Thomas from New York, who has the ability to hack into restricted computer systems; Tully from New Zealand, who has the ability to create live objects from pictures or information; and Luca from Scotland, who can manipulate the weather to his needs. I identified with the main characters because they are roughly the same age as myself, although I cannot confess to having any special powers myself.

The combination of three main characters from different backgrounds, who become friends, reminds me of other series that I have enjoyed, such as Harry Potter and the Percy Jackson books.

I would suggest the book is aimed at preteens or young teenagers and anyone who enjoys fast paced stories that cover different locations. I would like to read future books within this series as I would like to see what happens to each character and how they grow up.

Also released:

The Good Crisis. John Seager and Lee S. Polansky (editors). ISBN: 978 – 0979668579

Mortality, Marriage and Population Growth in England, 1550-1850. Peter Razzell. ISBN: 978-0904573190

New Perspectives on Malthus. Robert Mayhew (editor). ISBN: 978 1107077737

Letters

Malthusian own-goals

Matthew Nayler

I would like to thank the editor for the inclusion of my article on Bob Malthus (he was never 'Thomas' in his own lifetime) in last February's magazine and, in particular, for her selfless attempt to reinforce its message on the dangers of getting Malthus wrong by her own biographical piece.

For the record, and contrary to the editor's claims, Bob's main education was with Richard Graves at Claverton, then Gilbert Wakefield at Warrington and Bramcote. He could have been educated at home beforehand, but this is not known. The Essay was updated five times, not six (there were six editions) and Bob married on 12th April 1804; hence aged 38, not 42.

I am unclear why the editor thinks: "Malthus' analysis has been proven wrong in some respects." None of the points made in her subsequent paragraph contravene his theory.

The assertion that Malthus "was certainly right about one thing: population cannot grow indefinitely" is also questionable. What mattered to Bob was the rate of growth in population relative to that in the means of subsistence, and he was vague about countries' ultimate limits. As for the editor's "sooner or later, widespread famine, disease and war will halt or reverse the growth," these are temporary factors from which a population rapidly recovers.

Of much greater significance were the multiple howlers Population Matters trotted out to mark Bob's 250th, employing Champollion to spread the message far and wide that Population Matters does not know what it is talking about. For example, the claim he believed "population would grow faster than the necessary food supply, resulting in famine," is a mistake so old even Malthus himself took pains to correct it. The PM website also claims Bob "advocated family planning." He most certainly (and regrettably) did not.

Response from the Editor: Thank you for raising these points. We have reviewed your comments carefully and would like to express our regrets for any factual errors made in our material on Malthus.

Abortion Act

Keith Hindell

By the end of next year there will have been over 8 million legal medical abortions in Britain (excluding Northern Ireland) under the Abortion Act 1967. In 50 years, abortion has become an option for all pregnant women until the 24th week of gestation at the expense of the state. Moreover, women can now buy pills on the web which enable them to carry out a safe, reliable, do-it-yourself abortion at home without any outside intervention.

Motherhood is now a voluntary occupation bringing about a major advance in the life chances and status of women.

The Act has also had a major impact on our population. In broad terms, the number of pregnancies since the 1960s has gone up by almost 4 per cent, but the number of births has declined by 15 per cent. Currently one fifth of all pregnancies are aborted. The population of Britain has risen by 9 million over 50 years, mainly because of immigration.

It's time Population Matters gave a strong endorsement to abortion, because of its proven worth as a brake on population growth as well as its positive social and health effects. Now that abortifacients are reliable, safe, and moderately priced this do-it-yourself-at home method should be a central part of British overseas development aid, both public and private. If official bodies do not take this up they will find themselves bypassed by millions of women worldwide as they discover how easy it is to get abortion pills over the web.

Response from the Chief Executive: We support improved sex and relationships education, and family planning services, in order to reduce unintended conceptions. In the UK, there is much room for improvement in these areas. When contraception fails, we believe that abortion should be legal and safe, as recommended by the World Health Organization. Quite apart from any impact on numbers, the alternative is clandestine methods, which can result in the injury or death of the women concerned.



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