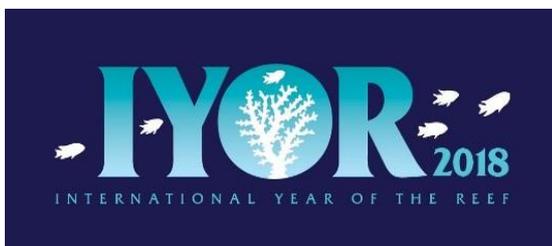




In the International Year of the Reef - TAKE THE PLEDGE!

Sign up to achieve these 10 realisable personal goals



For the recently launched International Year of the Reef (IYOR2018) (<http://www.iyor2018.org/>) the International Society for Reef Studies (ISRS) is urging its members and all others interested in or concerned about coral reefs, to take one or more of the practical steps in their day-to day living listed below, **to help save coral reefs from the existential threat that they now face.**

If a large number of members, colleagues and friends make this commitment together for IYOR2018, the effort will be magnified and the achievement will have more impact. We encourage members and others to show their commitment and sign up on the ISRS IYOR SIGN-UP website at <http://signup.com/go/GMEXeyo>.

Our list of practical steps you can take to help save coral reefs is:

- 1. Do ONE of the following: either turn back your heating or air conditioning by at least 1 degree Celsius or 1.8 degrees Fahrenheit and replace all your lights with LED bulbs OR invest in a renewal energy source or electric car**
- 2. Keep flying to a minimum: aim for no more than THREE return air-tickets in a year and offset all your flights, for example with the WorldLandTrust**
- 3. Reduce your meat and dairy consumption; we suggest eating meat no more than TWO times a week**
- 4. Make sure ALL the fish and sea-food you consume comes from sustainable sources**

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5. **Watch at least ONE film and read at least ONE book on Climate Change**
6. **Explain to at least TEN contacts THREE or so key facts behind climate change and its impacts**
7. **Join ONE campaign to help protect reefs or oppose climate change**
8. **Organise at least THREE educational talks and/or showings of the film Chasing Coral**
9. **Write to at least THREE local elected representatives about corals and climate change**
10. **Participate in or support at least ONE REEF CONSERVATION ACTIVITY. If you will be diving or snorkelling, learn how to recognise the different types of damage that can severely impact coral reefs, and send your observations to a relevant organisation. Alternatively, take part in or otherwise support a citizen science or volunteer project.**

The main cause of coral death around the planet is now CORAL BLEACHING (shown above), caused by GLOBAL WARMING – the result of increasing levels of CO<sub>2</sub> produced as a result of our thirst for fossil-fuel derived energy. The largest source of greenhouse gas emissions from human activities is from burning fossil fuels for electricity, heat, and transportation. Many of the ISRS “Ten Things YOU Can Do” are a response to this. The 4-page ISRS Consensus Statement on Climate Change and Coral Bleaching, which contributed to the successful outcome of the November 2015 Climate Change Conference (CoP21) in Paris provides a summary of the situation as it concerns coral reefs. It is available in English, French, Spanish, Chinese and Arabic at <http://coralreefs.org/publications/briefing-papers/> and <http://coralreefs.org/society-organisation/previous-society-news-information/>.

**In more detail the targets we propose, and the reasons for supporting them, are as follows:**

1. **As well as turning off the lights when not needed, make sure you have replaced all lights with LED bulbs and turn down the heating or turn back the air conditioning by at least ONE degree Celsius or 1.8 degrees Fahrenheit; OR, if you have already done this, consider investing in renewable energy, either financially or at home.** Home climate control can be optimized by using the programmer and/or using individual controls in each room (If you haven't yet worked out how to use these controls then please do so!). Make sure your house is well insulated and double-glazed if appropriate. To invest in renewable energy consider equipping your home with solar water heating, solar panels or a wind turbine – or even look at an electric or hybrid vehicle, if you can.
2. **Keep flying to a minimum - aim for no more than THREE return air-tickets in a year - offset all your flights, and reduce car use.** Use Skype / Zoom / Facetime to reduce the need for face to face meetings when you can. When you do need to fly, offset the carbon emissions from any air or cruise liner travel through organisations such as the [WorldLandTrust](http://www.worldlandtrust.org/eco-services/offsetting/individuals) (see <http://www.worldlandtrust.org/eco-services/offsetting/individuals>). Make sure you choose an organisation which uses accredited Verified Carbon Units (VCUs): each VCU confirms a reduction or removal of one tonne of carbon dioxide (or the equivalent) achieved by a project. Double your impact by using public transport and bicycles where practicable while travelling.
3. **Cut down on meat and dairy consumption as much as practicable;** we suggest eating red meat no more than TWO times a week. Even consider becoming vegetarian or vegan. Livestock production is the third most important general source of climate change gases (including methane) after transport and electricity generation. This is because methane is over 20 times more powerful a greenhouse gas than carbon

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dioxide (see e.g. <https://www.epa.gov/ghgemissions/overview-greenhouse-gases> and <http://timeforchange.org/are-cows-cause-of-global-warming-meat-methane-CO2>).

4. **Make sure ALL fish and sea-food you buy and consume comes from certified sustainable sources.** When dining out or shopping, ask if your choice of fish or seafood comes from a sustainable source and be prepared to make another choice if it does not. In developing countries and coral reef areas it may not be so clear what is or isn't sustainable, but ask, and push the envelope in raising awareness. Overfishing, besides being a major cause of the decline of stocks of reef fish, has second-order effects on reef ecosystems. Loss of herbivorous fishes results in overgrowth of coral by algae. Loss of invertebrate fish predators results in outbreaks of coral-destroying crown-of-thorns starfish or sea-urchins. Packaging should carry the Marine Stewardship Council (MSC) "tick" (see <https://www.msc.org/>) or the stock or source should be shown as sustainable on sites such as Seafood Watch in the US (<http://www.seafoodwatch.org/>) or the Marine Conservation Society (MCS) in the UK (<https://www.mcsuk.org/goodfishguide/search>). Similar information is available in *The Seafood Guide* produced by the Good Fish Foundation and WWF Europe, from SeaChoice in Canada and from the Australian Marine Conservation Society (AMCS) for Australia.
5. **Read at least ONE of the good books that summarise the evidence for climate change and watch ONE of the informative films.** Learn about the main facts underlying global warming and its impact on coral reefs and understand the critical issues that make the dangers of global warming so urgent yet so difficult for everyday people to believe. Al Gore's film *An Inconvenient Truth*, and the follow-up film *An Inconvenient Sequel: Truth to Power* (Paramount Pictures, 2017) are both available on Amazon, the more recent film *Chasing Coral*, in which ISRS members feature, is available free on Netflix. Good books include *The Nonsense Guide to Climate Change* by Danny Chivers and the *Rough Guide to Climate Change* by Robert Henson, while free primers that clearly explain the basics of climate change are available at <https://emanuel.mit.edu/> (16 pages) or <https://royalsociety.org/topics-policy/projects/climate-change-evidence-causes/> (8 or 36 pages).
6. **See if you can explain THREE or so of the key facts underlying climate change to family, friends, colleagues, strangers you just met, or individuals you interact with on social media, when the opportunity allows (say on TEN occasions).** A document with suggestions for key facts will be downloadable from this website. Alternatively hand over a copy of ISRS's consensus statement on *Climate Change and Coral Bleaching*. Emphasise that there are thousands of scientific studies providing overwhelming evidence that climate change is occurring faster than ever before, and that it's man made. The science is real, the data is irrefutable, and the experts overwhelmingly agree.
7. **Join at least ONE CAMPAIGN to reduce impacts to coral reefs or reduce climate change.** Many other impacts have contributed to the global decline in coral reefs. Sediment input that kills corals may result from inland deforestation and soil erosion, from dredging, or from coastal engineering. Nutrient pollution may result from sewage run-off or discharge, and agricultural run-off, as well as inappropriate port activities. Other impacts include infilling, outbreaks of crown-of-thorns starfish and sea-urchins, coastal development, and overfishing. There may be campaigns in your home or study area that you could get involved in, e.g. to secure tertiary treatment of sewage, to promote responsible fertiliser use by agriculture or to prevent river or coastal erosion. Alternatively join one of the many groups lobbying in favour of measures to prevent global warming. Ten highly rated campaigns are listed at: <https://www.theguardian.com/global-development-professionals-network/2013/nov/15/top-10-climate-change-campaigns>, including the campaigns runs by WWF, Greenpeace, 350, and Many-Strong-Voices,

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and examples from Australia and China. Details of these and others will be listed on our website while a search of the internet should reveal others closer to you.

8. **Organise at least THREE educational talks about climate change and the threats to coral reefs, and /or showings of the Oscar-nominated documentary film *CHASING CORAL***, to local schools / colleges or local societies / community groups. If you are a marine biologist you can probably give a talk yourself; alternatively you can invite an ISRS member willing to speak or arrange a showing of the film *CHASING CORAL*, which is long enough to fill an event on its own. A *CHASING CORAL* screening advice document (including details of how to obtain a licence and a copy of the film) can be downloaded at [https://www.dropbox.com/sh/3a4h1w2t18t9jqr/AABkpZnuclV-x5YEE6\\_20PQHa?dl=0](https://www.dropbox.com/sh/3a4h1w2t18t9jqr/AABkpZnuclV-x5YEE6_20PQHa?dl=0), while support materials are available at: <http://www.chasingcoral.com/in-the-classroom/>, and an amazing virtual reality application via <http://www.chasingcoral.com/vr/>. Example PowerPoint presentations that you can borrow or adapt will be available for download from the ISRS education committee page at: [www.coralreefs.org/education\\_committee/](http://www.coralreefs.org/education_committee/)
9. **Write to at least THREE of your local elected representatives** (congress person, Member of Parliament, member of state legislature or local council) about climate change and the threat to coral reefs. If they don't hear from you they'll just assume all is well as far as you are concerned. A draft letter and list of bullet points to consider including when composing your letter will be available on this website.
10. **Get involved in or offer your support to at least ONE CORAL REEF CONSERVATION ACTIVITY, either your own, or a citizen science / volunteer programme, or an existing conservation project.** If you dive or snorkel learn how to recognise the different types of damage that can severely impact coral reefs, so that you can tell coral bleaching from coral disease from crown-of-thorns predation. Then after your diving trip or holiday report your observations to a relevant organisation e.g. to the local conservation agency or national park office, or, in the case of widespread coral bleaching, to the NOAA CORALREEFWATCH office in Washington, which coordinate reports as well as monitors ocean temperatures (see [https://coralreefwatch.noaa.gov/satellite/research/coral\\_bleaching\\_report.php](https://coralreefwatch.noaa.gov/satellite/research/coral_bleaching_report.php)). Alternatively, if you cannot dive or snorkel in a coral area yourself, offer your support to a citizen science / volunteer project, or an existing research or conservation project, e.g. by offering your expertise, assisting with desk work or offering financial support to a student or other young diver. (A list of potential volunteer organisations or conservation programmes will be posted on this website as they become available).

It is not essential for anyone supporting these aims to commit to all the above actions or meet all of the above targets; anything that you can do under any of the ten headings will be beneficial. But if you are willing to try to meet most or all of the targets, please show your support for this initiative by signing up at our sign up website.

To SIGN UP please go to <http://signup.com/go/GMEXeyo>.

*This is a living document which will be revised regularly throughout the course of the year in the light of comments and suggestions received. Please send all thoughts and ideas to corresponding secretary of ISRS: email [rupert.ormond.mci@gmail.com](mailto:rupert.ormond.mci@gmail.com)*

*Rupert Ormond 14 Jan 2018*