Building personal resilience for research on climate change and biodiversity loss

SEES HDR Conference 2018 plenary address by Dr Chris McGrath


Balancing hope and realism

Recognise your* talent and diversity

* SEES HDR students

Even if you are not directly researching climate change and biodiversity loss, depression, anxiety, despair and burnout are common.

We all need to talk more about mental health. I hope that this presentation speaks to everyone.

OUTLINE OF PRESENTATION

PART 1: THE PROBLEM OF DESPAIR & BURNOUT

• A story.
• Climate change and biodiversity loss pose immense threats to the natural environment and society, yet the policy response to both has largely been a collective shoulder shrug.
• We are drowning in data already and more data seems unlikely to change ingrained political antipathy, apathy and inaction.
• Given this, how can researchers manage feelings of personal despair and burnout?

PART 2: FINDING YOUR ANSWER

• (5) Strategies for SEES HDR researchers to cope in the face of ongoing inaction on climate change and biodiversity loss

Nearly 40% of SEES HDR students are studying climate change and conservation topics

e.g. “Assessing Species Vulnerability to Climate Change in Tropical Asia: Implications for Biodiversity Conservation and Forest Management”

e.g. “Numerical Simulation of Hydraulic Fracturing of Unconventional Reservoirs”

Geology, 339 (63%)

Conservation, 20%

Climate change, 14%

Climate change / conservation, 3%

Other, 3%

305 SEES HDR students in a wide range of disciplines
A story

(about me and you)

When I was 15 ...

A winding path:

- Science / Law degree at UQ in the 1990s
- Enforcement Officer with Qld Dept. of Environment 1998-1999
- Master of Laws in 2000
- PhD 2001-2007
- Barrister 2000 – present
- Teaching & public education
The enormous scale of coal mines, especially the new mega-mines like Carmichael, is difficult to comprehend.

Carmichael Coal Mine (approx. 1000km NW of Brisbane)

Understanding the scale of the Carmichael Coal Mine compared to UQ
Comparable area to Carmichael Coal Mine mine pits (A-P), underground mines and mine waste disposal area (~8 km x 32 km)

The final major approval of the mine was given in early 2016, in the midst of the third global coral bleaching event severely impacting on GBR

"This is Australia’s biggest ever environmental disaster"
Professor Justin Marshall, UQ

Current climate conditions are too high for healthy reefs. If we continue on our current path (e.g. Adani mine) we are certain to lose the Great Barrier Reef.

The grant of the final major approval for the Adani coal mine in the midst of coral bleaching indicates not only have we not learnt what we must do to protect the reef, we are actively moving in the wrong direction to protect it.
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Global Mean Estimates based on Land and Ocean Data

[Graph showing temperature anomaly from 1880 to 2020]

Source: GISTEMP https://data.giss.nasa.gov/gistemp/graphs/

Large parts of the Arctic super-heated in October 2016, as much 8.7°C above the 1951–1980 mean temperature (with parts up to 20°C hotter). The Arctic had the lowest October ice extent on record and “as of November 1, sea ice volume is lowest on record.” Source: NASA via Joe Romm / Thinkprogress

April 2016: “There is clear evidence of the extent and severity of the bleaching, which supports the conclusion that the reef is experiencing the worst bleaching event ever seen....

...the level of bleaching... is catastrophic in the northern sector. Along the length of the Great Barrier Reef from north to south, there is a gradient of decreasing severity, from very severe to no sign of bleaching.”

Source: Jon Day, ARC Coral Reef Studies, JCU, “Great Barrier Reef bleaching stats are bad enough without media misreporting" The Conversation, 27 April 2016

The same reef in American Samoa before, during, and after the 2015-2016 coral bleaching event. Image: XL Catlin Seaview Survey

We are drowning in data on climate change and biodiversity loss
Alarm bells rang loud & clear in 1998 for coral reefs, one of the Earth’s most important ecosystems, which millions of people depend upon for food and livelihoods.

Climate change and biodiversity loss pose immense threats to the natural environment and society, yet the policy response to both has largely been a collective shoulder shrug.

"The former Canadian environment minister Charles Caccia ... compared the country’s position on greenhouse gases – pledging to reduce emissions on the one hand while increasing tar-sands production on the other – to ‘attempting to ride two horses galloping in opposite directions.’"

Elizabeth Kolbert (2007) *Field Notes from a Catastrophe*
Given this, how can researchers manage feelings of personal despair and burnout?

PART 2: FINDING YOUR ANSWER

5 strategies

1st strategy:
Be kind to yourself: remember why you started your journey.

Jarod Harris 1972 - 2012

Photographers: unknown

2nd strategy:
See your career as a marathon, not a sprint.

It is really common to see people in the conservation sector come in and work incredibly hard. They keep it up for a few years and then burnout and drop out.

Don’t let that happen to you.
See your career as a (30 year) marathon, not a (1-2 year) sprint.

3rd strategy:

Recharge regularly:
- exercise
- spend time with your friends, your family & doing things you love
- take weekends off (turn off the news) & holidays
It is important to stay in touch with the wonderful places (and people) that you love. They will recharge you during your career and remind you what you are working to protect.

4th strategy:

Accept that it is rational to despair in the face of the crises facing the Earth. Move beyond acceptance of that to work for positive change despite the potential for failure.

It is rational to despair in the face of the crises facing the Earth but we can move beyond acceptance of that to work for positive change despite the potential for failure.

Practice which sustains active hope:

1. Take in a clear view of reality.
2. Identify our vision for what we hope will happen.
3. Take active steps to help bring that vision about.

Source: Joanna Macy & Chris Johnstone, Active Hope

Hope is an essential part of success.

Despair and denial have the common outcome of inaction. You/we don’t take action because (for despair) the problem is hopeless or (for denial) we don’t accept it is a problem that needs addressing.

There is no “plan B” or “planet B” we or our kids are going to.

See Joanna Masy’s work on despair and empowerment: http://www.joannamacy.net/
5th strategy:

Choose to use the skills and tools you have to save what you can. Choose to fight to protect the people and places you love.

“Every important change in history was impossible until it happened.”
— Nelson Mandela

“We shall defend our island, whatever the cost may be, we shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender.”
— Winston Churchill, 1874-1965

We need to fight for the future we want.

Being nice, expecting others to be reasonable and that our governments will take action necessary to prevent climate change is not working at present.
“Fighting” in this context does not mean acts of aggression but refusing to passively accept unacceptable outcomes and actively working to avoid those outcomes through any non-violent political, public and personal actions available to you.

Don’t accept unacceptable behaviour or government policies.

Don’t give up.

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1. Be kind to yourself: remember why you started your journey.
2. See your career as a marathon, not a sprint.
3. Recharge regularly:
   - exercise
   - spend time with your friends, your family & doing things you love
   - take weekends off (turn off the news) & holidays
4. Accept that it is rational to despair in the face of the crises facing the Earth. Move beyond acceptance of that to work for positive change despite the potential for failure.
5. Choose to use the skills and tools you have to save what you can. Choose to fight to protect the people and places you love.

Questions?

Do you have any strategies for dealing with despair and burnout you’d like to share?