



Certified Organic Forestry

Climate Change Carbon Offsets &

Organic Forestry

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Why

Q...
Organic Forestry?

&

Why Now?



Stern

image source: J. Paull



Nicholas Stern

- Government Economist
- Economists are credible bearers of bad news
- Cheaper to act now than later
- Adapt & mitigate
- We will get MORE trees, or at least NEW trees



Perfection: A combination of elements in harmony and balance.

Greenfleet

**Offset your carbon
footprint... plant trees**



FLY CARBON NEUTRAL



Carbon Offset Menu

- We don't like about the environment
- More information about our environmental initiatives
- What can you do?
- Taking action in other areas of your life
- How we calculate the precise volume for your seat
- What offset programs will my money go to?
- FAD's



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CROSS GREEN


Helping you balance your carbon footprint





You the forester...

- “feel good” forestry
- retail forestry ... a new phenomenon
- we become de facto tree planters
- “consumerization” of forestry
- what kind of forestry are we financing?
- and does it matter?



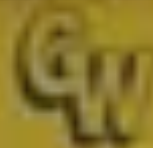
Economic instruments as tools of Environmental Management

- A history of success
- Results can be irreversible
- An example



RIP: September 7, 1936

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Tree planting lessons

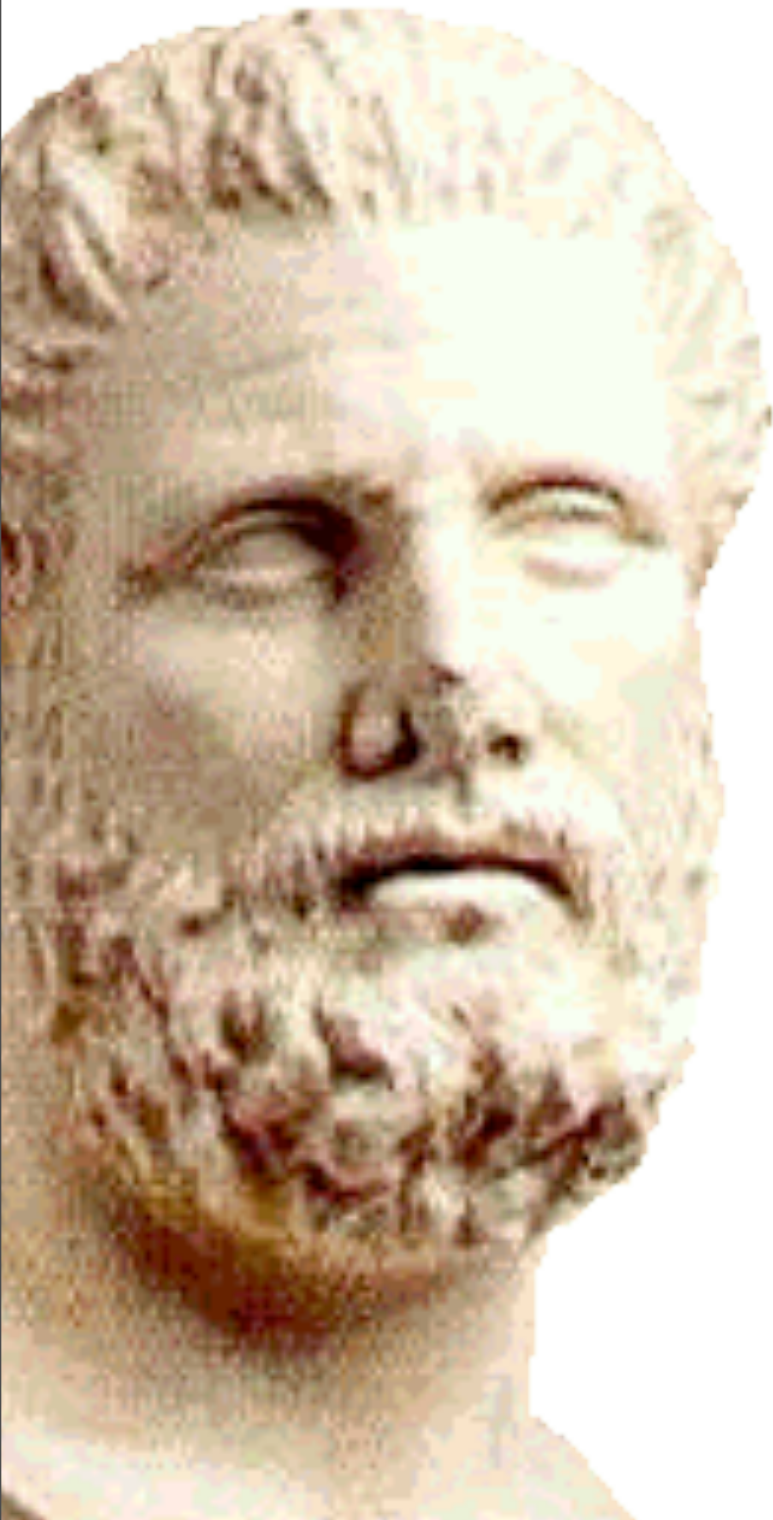


“Glyphosate, an essential
pre-planting herbicide”

Tomkins, 2004



What Sarah learned?



**“First
do no
harm”**

Hippocrates
c 460 BC - c 377 BC

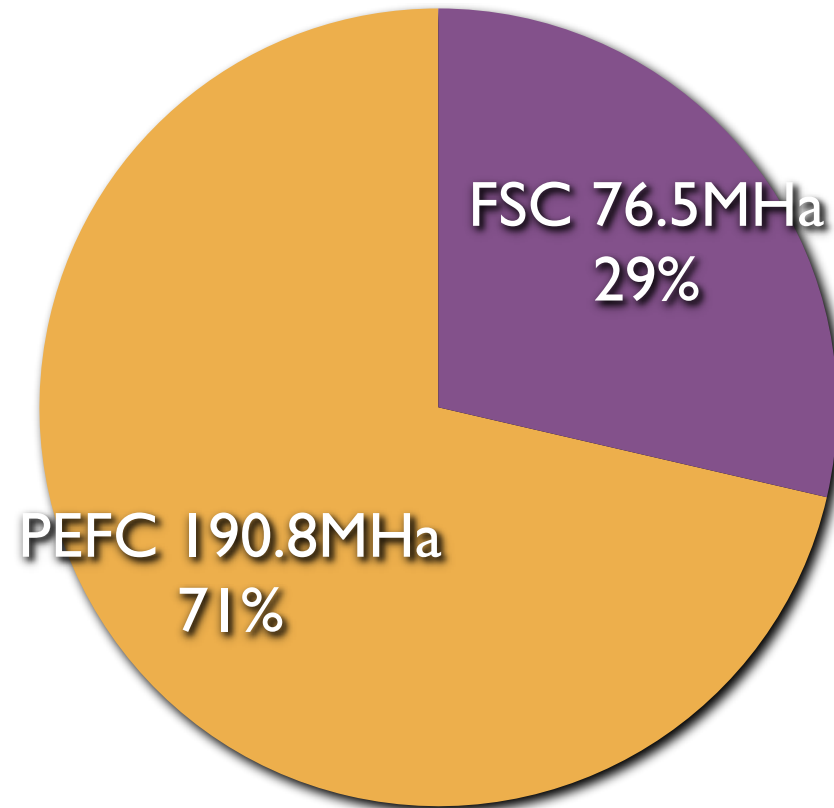


**“For every
complex
problem there
is a simple
solution,
and it’s wrong”**

Mencken, 1920

image source: www.baltimoresun.com

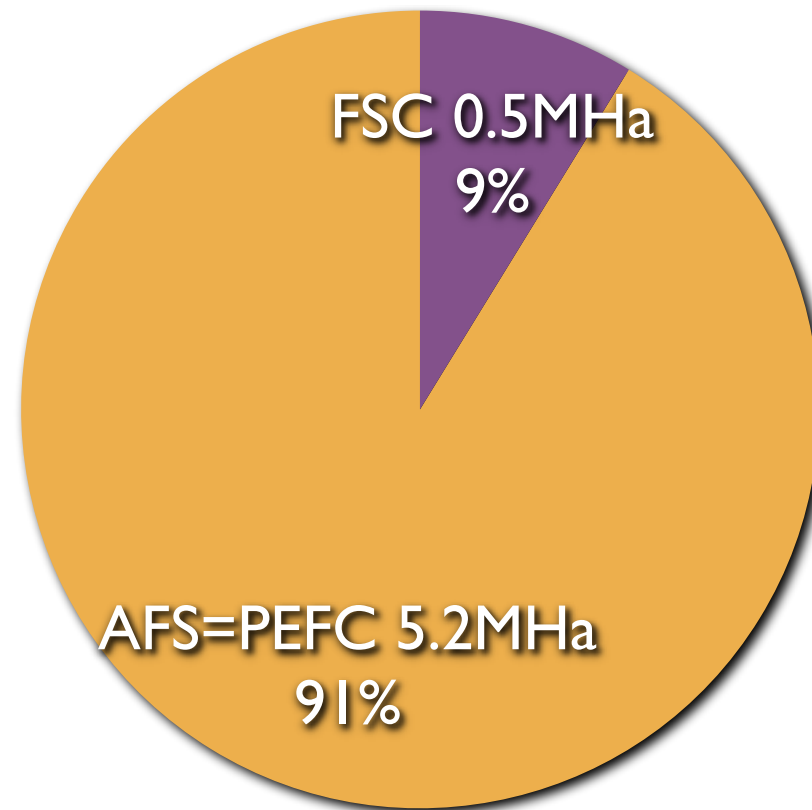
Certified Forestry Worldwide



FSC = Forestry Stewardship Council

PEFC = Programme for the Endorsement of Forest Certification

Forestry Certification in Australia





Forestry Industry - “key benefits of certification”:

1 benefit:

“An opportunity to de-politicise
forestry”

Crawford, 2006, p.28 (Aus Govt publication)

How to grow trees

image source: J. Paull



Plantation Forestry

“Glyphosate, an **essential** pre-planting herbicide in plantation establishment, in most situations” (Tomkins, 2004, p. 71)

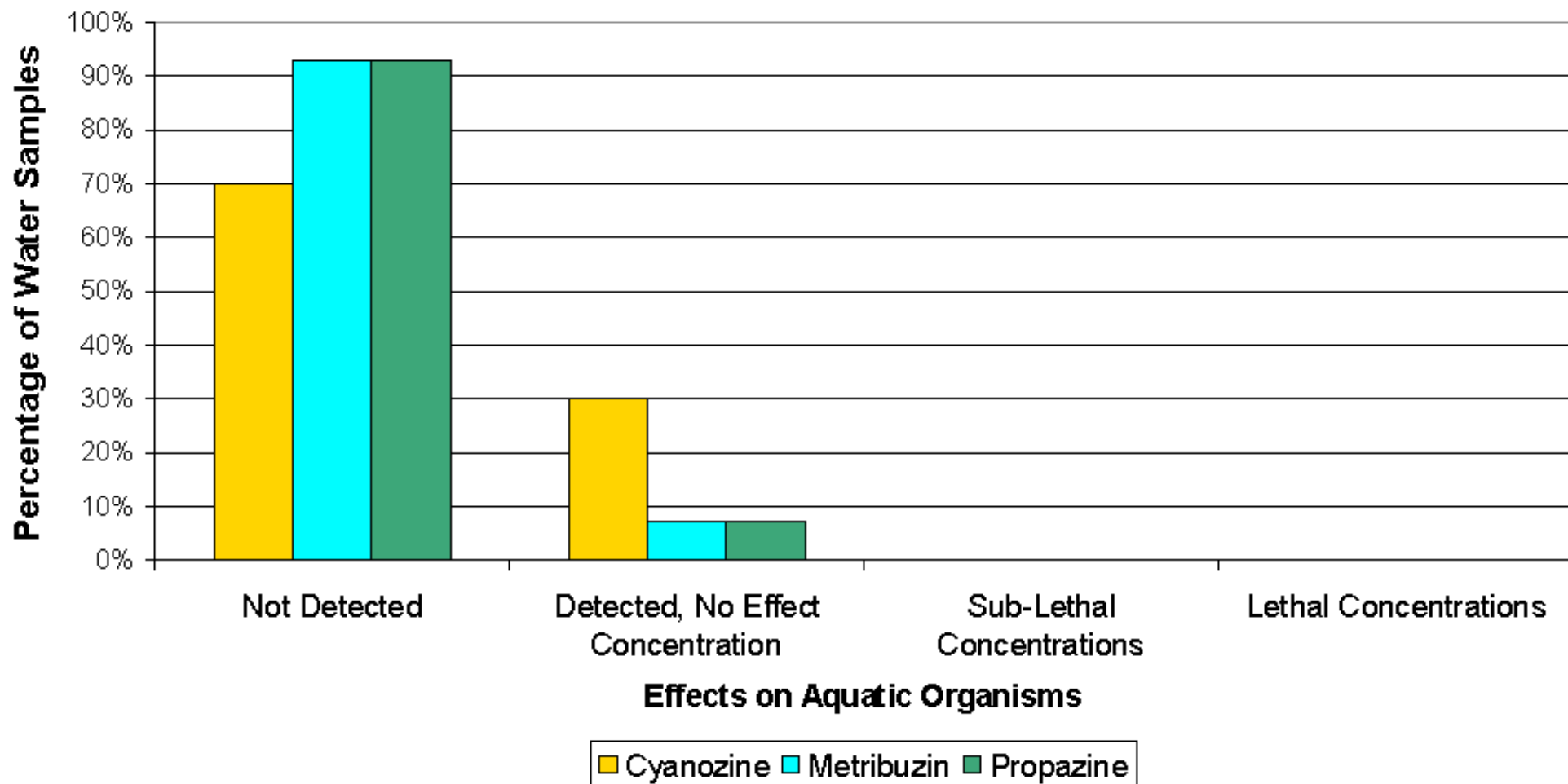
“the use of pesticides is an important management tool ... the use of residual herbicides ... is **essential** to give long term weed control” (Tomkins, 2004, *Australian Forestry*, p. 68)

“in a large scale industrial plantation ... mechanical application of pesticides is **required**” (Jenkin & Tomkins, 2006, FWPRDC, p. 6)



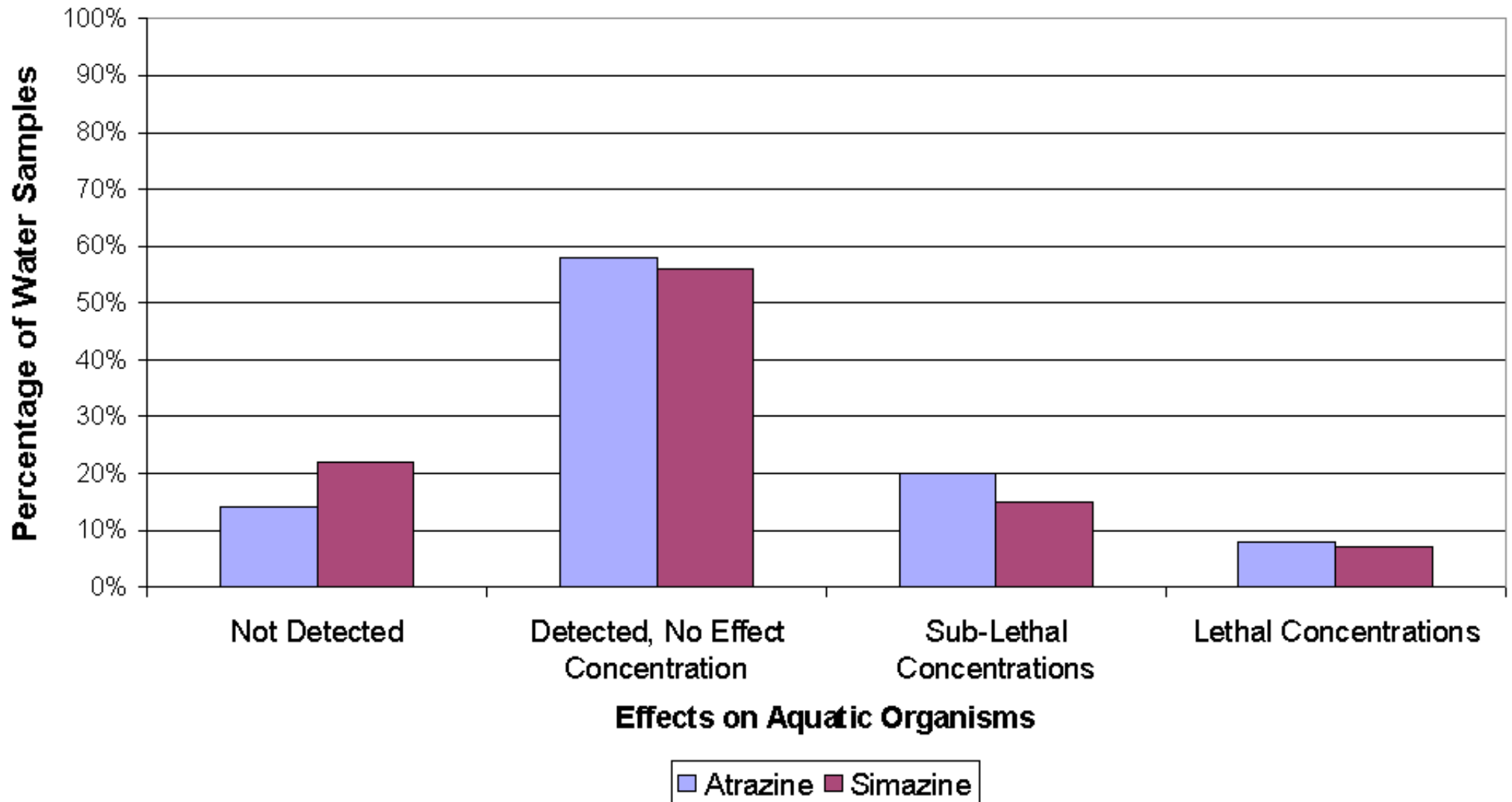
Photo: K. Paull

Triazine Herbicides Used On Food Crops (Davies et al., 1994)



(Graph source: Scammell, 2004)

Triazine Herbicides Used On Plantations (Davies et al., 1994)



(Graph source: Scammell, 2004)



image source: Peter Godfrey <www.tasmaniantimes.com>



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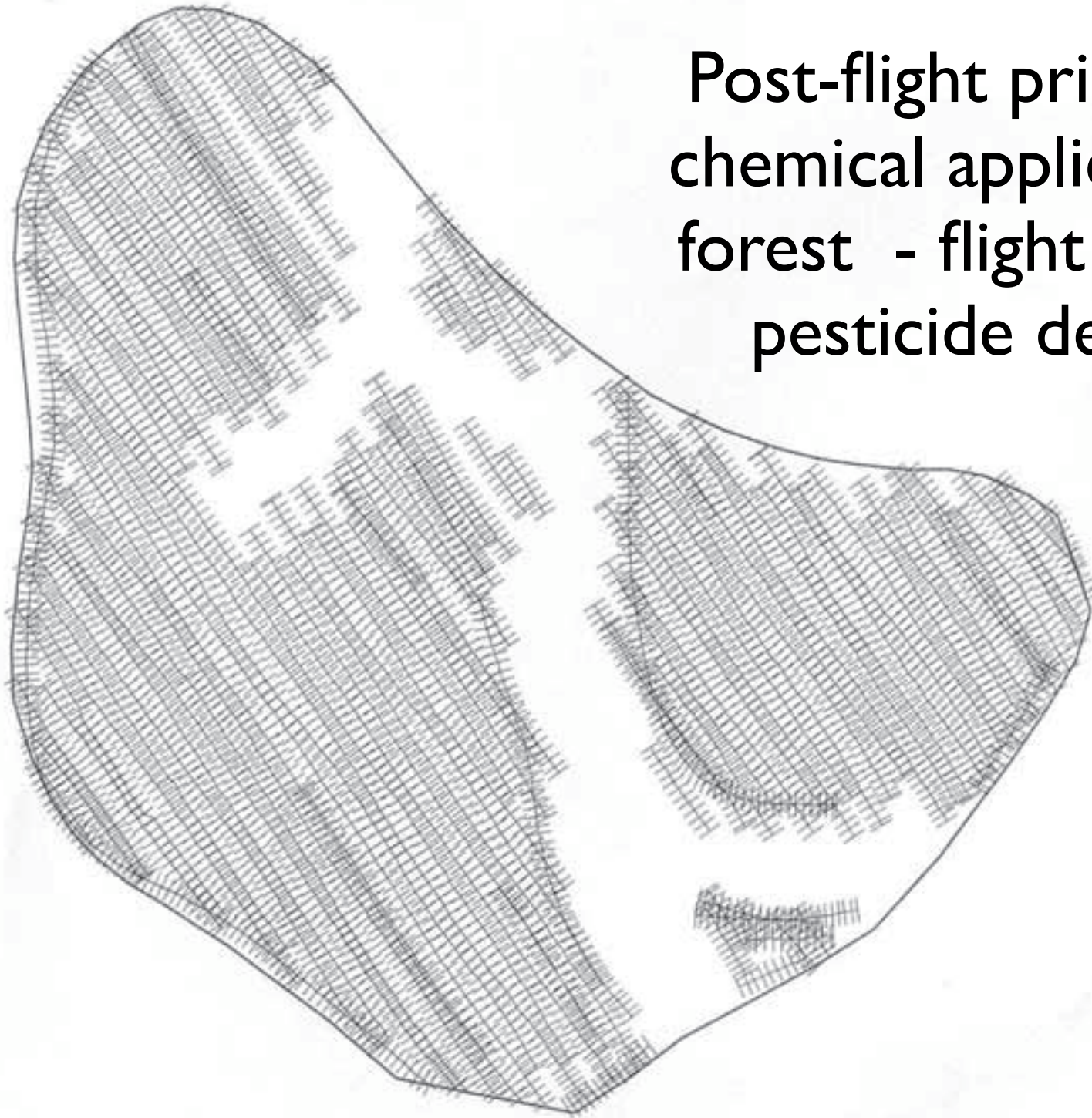
image source: Peter Godfrey <www.tasmaniantimes.com>

**Marked-up
aerial
photograph
of forest
scheduled
for spraying
- including
exclusion
zone**



image source: Elliott & Hodgson, 2004, Tasforests, 15, p.34

Post-flight printout of chemical application to forest - flight paths of pesticide delivery



Losing the pesticides...

Table 4. Summary of water sampling results for pesticides, 1993–2003.

Pesticide	Registered trade name	Total samples	Guideline Value (GV) (µg/l)	Health Value (HV) (µg/l)	No. sample readings >	
					GV	HV
Herbicides						
Atrazine	Gesaprim	647	0.5	20	41	2
Clopyralid	Lontrel	106	1000	1000	0	0
Dicamba	Banvel	9	N/A ¹	100	0	0
Diquat	Regione	2	0.5	5	0	0
Glyphosate	Roundup	1590	10	1000	2	0
Haloxyfop-methyl	Verdict	62	N/A	N/A	ND ²	ND
Hexazinone	Velpar	509	2	300	36	0
MCPA	MCPA	4	N/A	N/A	ND	ND
Metosulam	Eclipse	6	N/A	N/A	ND	ND
Metsulfuron-methyl	Brushoff	1032	N/A	30	N/A	0
Simazine	Simazine	36	5	20	8	0
Sulfometuron-methyl	Oust	177	N/A	N/A	N/A	N/A
Terbacil	Sinbar	44	10	30	0	1
Triclopyr	Garlon	11	N/A	10	N/A	0
Insecticides						
Alphamethrin	Alphamethrin	86	N/A	N/A	ND	ND
Alpha-cypermethrin	Dominex	19	N/A	N/A	ND	ND
Chlorpyrifos	Chlorpyrifos	1	N/A	N/A	ND	ND
Cypermethrin	Cypermethrin	23	N/A	N/A	ND	ND
Spinosad	Success	32	N/A	N/A	ND	ND

¹N/A = no value specified in the Australian Drinking Water Guidelines (NHMRC 1996).

²ND = no pesticide detected when the sample was analysed.



Forestry Herbicides

“herbicides are usually applied only in the first and second season” Tomkins, 2004, p.71

“**aerially apply herbicides** ... with spring, autumn and summer applications” Jenkin & Tomkins, 2006, p. 46



Forestry Pesticide Schedule

- **Herbicides** (eg Atrazine): pre-planting & first several years
- **Faunacides** (eg 1080): pre-planting against “browsing animals” eg wallabies, possums, pademelons etc
- **Insecticides** (eg Carbaryl): “as required”, most intensely in the first few years
- **Fungicides**: “used to treat plantations up to 15 years of age” Jenkin & Tomkins, 2006, p. 118



Australian Forestry Pesticide List

- **Herbicides** x 25,
(often used in combination, & includes
atrazine & simazine)
- **Insecticides** x 9
- **Fungicides** x 2
- **Adjuvants** x 7, including synthetic latex

(source: Jenkin & Tomkins, 2006)







Devil Facial Tumour Disease (DFTD)

GMOs?

AFS (=PEFC): GMOs allowed

(Crawford, 2006)



**Pesticide
deficiency?**



Forestry Standards are weak standards:

- FSC Principle #1: “compliance with laws”
- FSC Principle #5: “ensure economic viability”
- FSC Criterion 6.6a: “strive to avoid the use of chemical pesticides”
- “Simazine is banned” under FSC... but there is an Australia-wide derogation (exemption) (Tompkins, 2006)



A Sham?

“Both the AFCS [AFS] and PEFC are a **sham** designed to pass off wood and wood products as legal and sustainable in markets where concerns over environmental and social justice have never been higher”

Wilderness Society, 2005, p.17



Certified Organic Forestry?

- No IFOAM Standard
- IFOAM Draft Standard 2002, voted down 2005
- Time to revisit Certified Organic Forestry
- “Fighting” CO₂ with atrazine, simazine, 1080 & glyphosate is ecological nonsense



Certified Organic Forestry Standards?

- There are 2 **Certified Organic Standards**
- **Naturland** - German Organic Certifier
- **Debio** - Norwegian Organic Certifier

Carbon/ Pesticide Matrix	Pesticide Positive	Pesticide Neutral	Pesticide Negative
Carbon Positive	+,+	+,0	+,-
Carbon Neutral	0,+ Offset Chemical Forestry	0,0 Offset Organic Forestry	0,-
Carbon Negative	-,+ Chemical Forestry	-,0 Organic Forestry	-,-

Carbon/Pesticide Matrix (CPM)



Carbon offsets
with
Pesticide onsets
...
is trading on a lie

One foot no good,
Two feet OK

(apologies to
George Orwell)



Forestry...
“World’s Best Practice”?

FSC

PEFC (& AFS)

“World’s Next Practice”?

COF

(Certified Organic Forestry)

A scenic view of a forest with a valley in the background. The foreground is filled with lush green trees, and the background shows a valley with a river or stream, surrounded by more trees and hills under a clear sky.

Solution: Certified Organic Forestry Standard

- (a) Certifiers individually
- or
- (b) IFOAM

image source: J. Paull

A scenic view of a forest with a valley in the background. The foreground is filled with lush green trees, and the background shows a valley with a river or stream, surrounded by more trees and hills under a clear sky.

Market drivers of
Certified Organic Forestry
volunteer carbon offsetters
green consumers

New Foresters → New Rules

Thank you & Questions

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