



Winter 2010 Number 3/2010

# Newsletter

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## Postcards to the premier

Thank you everyone who's signed SIMO's postcard to Premier Bligh. Our message: Do not renew expired mining leases. Do not permit further mining to clear old growth forest and destroy remaining pristine high dune country. Mining is unsustainable. It is time for Stradbroke's economic future to be placed on a sound, sustainable footing. SIMO is sending the postcards in bundles of 50, with letters: 'In the next weeks on Enterprise, 60ft banksias are to be bulldozed. Enterprise has already been permitted to run overtime, as it expired in 2007. We urge you not to renew the Enterprise leases.'

'... the new national park must not be made hostage to jobs ... Mining was already declining ... Yarraman is due for closure in just a few years. Of course the mining company would like to stay on NSI for another 100 years – mining, and quarrying the sand it has illegally stockpiled on expired leases 1117 and 1121. (This sand must be used to re-form landscape destroyed by Enterprise mine.)'

SIMO was formed in 1978 to stop a bridge from the mainland. Since then, SIMO has waged many campaigns to protect North Stradbroke Island's environment and to lobby for conservation, sustainability and wise development.

## National park for NSI – but will it be mined first?

Premier Anna Bligh surprised everyone on Sunday 20 June by announcing national park for 80 per cent of North Stradbroke Island by 2027. Fifty per cent of the island will be national park by 2011, and the remainder progressively until the last mining lease expires in 2027.

We join those who would congratulate the State government on protecting the island. But the extended period to realise national park raises concern, because if mining continues, it will destroy irreplaceable pristine country – the very country the national park is legislated to conserve and protect.

Sixty years of mining have ravaged much of Stradbroke. Mining alters the landscape forever. Rehabilitation cannot replicate the original environment. Rehabilitated areas will always be a weak link, lacking resilience, unable to withstand invasive species, fire, extreme weather events and the impacts of climate change.

The mining company, Unimin, is operating on numerous expired leases. The premier stated that no applications for expired leases would be renewed following her announcement. But the future of the 20-odd leases that expired prior to 20 June remains unclear. These leases cover a large part of the island. The government legally must not renew an expired lease unless all the conditions in s286A of the Mineral Resources Act 1989 are met. The Minister must be satisfied that operations 'are an appropriate land use; and will conform with sound land use management', and 'the public interest will not be adversely affected by the renewal'. Mining of any country designated for national park is neither an appropriate land use nor in the public interest.

Unimin is putting out false, misleading information in the community. It claims it has an 'extractive' industry: it does not (mining leases do not permit quarrying). It claims to subsidise the island electricity: it does not. It claims that transport and fuel will not be economical to supply to Stradbroke, and tourism cannot make up the slack when island mining jobs finally disappear. Unimin is unqualified to pronounce on these questions, and its sole interest is its own profits. There needs to be an independent report on NSI's current and future economy so that the community can have an informed and balanced discussion.

Unimin serves the island community ill by fanning doubts and fears about the future, when in fact there is an exciting new chapter beginning for NSI, with nature tourism and national park spearheading an environmentally sustainable economy and opening up the whole island.

## SIMO committee election

At the AGM on Saturday 19 June, the new committee was elected:  
Jackie Cooper, president  
Jan Aldenhoven, vice president  
Fran Quinn, treasurer  
Susan Martin, secretary  
and Ellie Durbidge and Haig Beck  
Thank you to all who have volunteered to serve on the SIMO committee.



## From SIMO treasurer: Welcome new members, and thank you for donations

Welcome to our new members. Thanks too to those who've renewed their membership, and also to those who've sent donations. Receipts will be scanned to you on email, or included with your next hard copy *Newsletter* if you don't have email.

For members not sure whether or not they're financial, or those with other membership enquiries, please contact the SIMO Treasurer at [quinnbris@optusnet.com.au](mailto:quinnbris@optusnet.com.au) or 187/501 Queen Street, Brisbane 4000.

## SIMO Newsletter July 1982

*'A landslide, the direct result of Consolidated Rutile's mining operation at Blaksley's Lagoon, 6km S of Dunwich, wiped out a section of coastal swamp, plus mangrove and seagrass areas. Evidence of the impending slip was obvious for 2 years prior to the disaster but all the signs (and SIMO's warning letters) were ignored by both government departments responsible and the company.'*

## 32nd SIMO AGM: president's report

A few years ago the government wanted to extract an additional 22 megalitres a day from the aquifer. SIMO objected and called for research to evaluate the sustainable amount to pipe to the mainland. After a strenuous campaign by islanders, the premier agreed, and monitoring bores were installed and a water resource plan was begun. That process is nearing completion. Although we still can't be sure that the present extraction amount is sustainable in the long term, at least data are being collected and modelling of the aquifer is being refined.

Last year, SIMO informed the Quandamooka Combined Aboriginal Organisations Forum about the Council's intention to grant a 30-year management contract for the camping grounds to a large holiday park operator. We feared that commercialisation would change the low-key island character of the camp grounds. We thought the Council needed to talk to the Indigenous community. Stradbroke is after all an Indigenous island, and caring for country is Indigenous business. The mayor and the Council allowed an island bid for the management contract, directed by Indigenous Business Australia, which has been successful. The new organisation is Minjerribah Camping and it will, we all hope, implement environment-friendly policies and be a source of training and employment for islanders, black and white.

It is very important to plan for jobs on Stradbroke. Minerals are running out. Yarraman mine is scheduled to close in 2014. Mining employs less than 20 per cent of island residents. Of course mining was a big player here for 60 years. But Stradbroke's true future is environment-based and lies in conserving environment assets, not destroying them.

A few years ago, SIMO opposed CRL's proposal to sell sand for construction uses. So confident is CRL of putting this plan into practice that it cleared a vast area and created two sand mountains, visible from across the bay, to be quarried at the rate of half a million tonnes per year for the next century.

The Council unanimously rejected the mining company's application to quarry sand in 2008. Then CRL appealed in the Planning and Environment Court. But last year SIMO, FOSI and others presented preliminary points to the court. We lost that round, so we appealed. If that decision goes against us, we could be liable for the other side's costs; and the case would proceed to a full hearing in the P & E Court, a major drain of cost and energy. *[We won: see p 8, 'Court stops sand removal'.]*

I must acknowledge the considerable debt of gratitude we owe our legal team. Tom Quinn, barrister, and Richard Carew, solicitor, have been the backbone of the complex legal campaign to protect Stradbroke and to have national park declared. They have drawn on the help of barrister, Stephen Fynes-Clinton. SIMO or FOSI could not prevail in court without their legal tenacity.

It might come as a shock to know that the mining lease on which CRL has built the sand mountains it plans to quarry expired nearly three years ago. In fact more than 20 of the mining companies' leases have expired or will expire by May 2011. These leases were granted in the time of the Bjelke-Petersen regime, dark days for conservation. Today, with South-East Queensland's growing population putting pressure on environment assets, Stradbroke is a stand-out asset in need of total and immediate protection.



The national park you could have ...



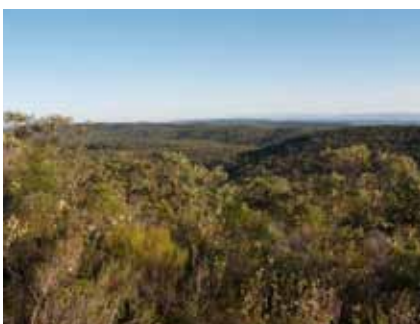
Looking across Eighteen Mile Swamp



Blue Lake, the only existing national park



Fern gully



The high dune heathland country  
Photographs: Glen Carruthers and Jan Aldenhoven

Late last year SIMO presented government with a lengthy document detailing why the expired mining leases should not be renewed. If leases are renewed, some of the last remaining tracts of pristine old growth forest and ancient dunes will be bulldozed. This is in high dune country with magnificent 360 degree views. It is prime country for national park.

The government could declare most of Stradbroke national park in this term of government, without incurring compensation to the mining companies, by not renewing the expired mining leases and amalgamating that land with other pristine country not covered by leases.

We advocate declaring most of the island national park, under joint management with the Traditional Owners.

I would like to acknowledge the Save Straddie Alliance in raising public awareness about the damage mining is doing to the island and the need for national park. The Alliance is FOSI, Queensland Conservation Council, Community Alliance for Responsible Planning, Fraser Island Defenders Organization, Moreton Island Protection Committee and the Wildlife Preservation Society of Queensland. It is wonderful to see these groups coming to the aid of Stradbroke at this critical time.

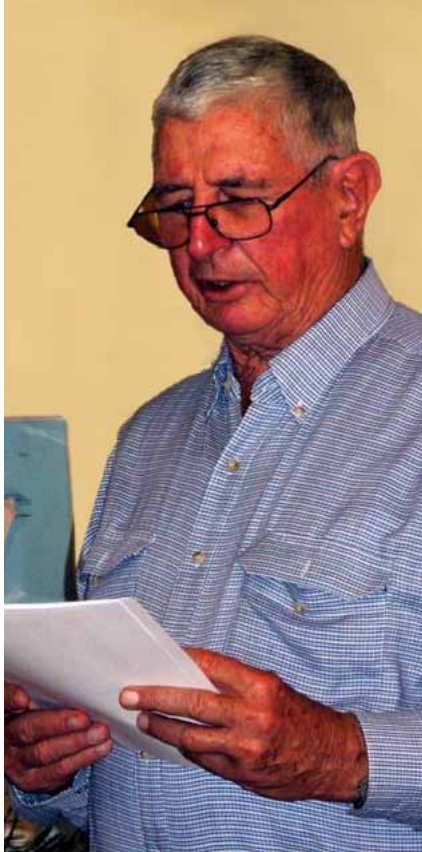
It's not just mining destruction that we are fighting. It's also the unlawful extraction of non-mineral sand since the early 1990s. Unimin is to be prosecuted for selling sand for construction and landscape uses without any permits. Last year Unimin applied to the Supreme Court to have the definition of mineral sand changed so that its construction sand business would be legitimate. The judge found that the sand does not fit the definition of mineral sand, and Unimin has no right to take it, as it belongs to the State. [The Court of Appeal has since confirmed the unanimous Supreme Court judgement that Unimin's taking and sale of the sand were unlawful.]



Unimin lease 7064: Silica mining leaves little sand for rehabilitation

The great loser from the unlawful wholesale sand extraction has been the environment. Mining of silica already removes nearly all the sand. And on top of this, Unimin has been extracting and selling sand needed for re-forming land that mining has laid waste. SIMO urges the government to charge Unimin with the indictable offence of theft of the non-mineral sand. Following a successful prosecution, the government could claim proceeds from the company amounting to millions of dollars.

SIMO is disappointed that the Koala Conservation State Planning policy does not include Stradbroke, so island koala habitat is not protected. Mainland koalas are expected to become functionally extinct and Stradbroke's koalas could become the only population left in the region. Knowledge about island koalas is patchy. Are numbers stable or increasing or decreasing? We have no idea. The Council is conducting annual counts in the three townships. But it is also essential that we search for evidence of koalas throughout the island wherever we have historical and anecdotal reports of sightings.



John Sinclair is known as the man who saved Fraser Island. He is a founder of the Fraser Island Defenders Organization (FIDO), and was the engine of the formidable force that eventually stopped sand mining and logging on Fraser, which was made a national park and given World Heritage status. In 1993, John was awarded the Goldman Environmental Prize – the environmental activists' equivalent of the Nobel – and included among the UN's prestigious Global 500 for services to the environment.



Jackie Cooper listens to John Sinclair. John's full speech is available on SIMO's website under News: [www.simo-stradbroke.org](http://www.simo-stradbroke.org)

## SIMO Newsletter July 1982

*'Mining has commenced in ML931 and threatens the future of the outlet creek from Blue Lake, the many middens associated with it, and the quality of Blue Lake National Park which adjoins the lake.'*

## The tale of two islands John Sinclair's address to SIMO AGM

It was Kath Walker's deeply moving poem, 'Minjerriba' that had inspired me to fight so doggedly to protect Fraser Island – particularly those lines:

*But Minjerriba's back is now broken;  
Men came and tore out his guts;  
Stole his rich grains of sand,  
Stripped his cloak of cyprus and gum,  
Drained water from his ageless eyes  
And weakened this giant in the sun.*

However, my legal battles with Joh Bjelke-Petersen saw me lose my job and ultimately move to live interstate for 19 years.

... I welcome the opportunity now to make up some of that not quite lost time and to focus on the tale of our two islands.

I do this out of a sense of guilt in having devoted myself to Fraser Island while knowing that 24 hours a day, seven days a week for 30 years miners have been churning away the sands of Stradbroke ...

By the time the real threat to Fraser Island emerged in 1970, sand mining had already been eating away at the heart of Stradbroke for two decades and the impacts were ringing very loud alarm bells through Queensland's infant conservation movement.

The fight to save Fraser Island from sand mining was inspired by ensuring that it didn't become another Stradbroke Island. ... Stradbroke was unfortunately seen as a sacrificial lamb in the various anti-sand mining campaigns that were fought to save other sand masses, from Moreton Island to Gladstone. However this sacrificial lamb has spilt more than enough blood ...

Fraser Island and Stradbroke Island have much in common: ... Both have the Pacific Ocean on one side and magnificent sheltered bays that are internationally recognised Ramsar wetlands on the other. Both have been subject to sand mining, but sand mining scarred only about 500ha or about 0.2 per cent of Fraser Island between 1971 and 1976. The impacts of that are still visible but not as visible as the impacts of mining on Stradbroke that could be seen from the mainland.

The differences between our two islands are most significant: ... The Great Sandy National Park covers almost 99 per cent of Fraser ... Fraser Island has about 350,000 visitors annually, and independent consultants have calculated that Fraser Island's tourist industry generates over \$280 million for the national economy annually, and an estimated 2880 jobs are generated in the Fraser Coast and Sunshine Coast regions from tourism and recreation on Fraser Island. However the Queensland Yearbooks suggest that the total output of mineral sands from the State is worth only \$100 million annually (not all from Stradbroke).

Because sand mining operations were out of the public eye, few had access to see exactly what was occurring. But those who did were appalled. Legendary ecologist the late Len Webb was one who saw the impacts of devastation of the 18 Mile Swamp and the gouging of Yarraman Hill, and this increased his resolve that such an environmental catastrophe should never be inflicted on Fraser. University of Queensland's Walt Westman and Alan Thatcher studied rehabilitation attempts and concluded that it would take 500 years, if ever, before anything approaching the original ecosystems could be re-established. ...



John Sinclair talking with locals after the SIMO AGM



Fran Quinn and Simon Baltais

### SIMO Newsletter March 97

*'... sand-mining operations on Stradbroke Island have been responsible for the draining of Lake Kounpee, the deterioration of Blakesley Lagoon, the blow out of dredge ponds at Bayside and Main Beach, the flooding of Native Companion Lagoon and extensive destruction at Amity Point of both the fresh water and tidal areas and the general loss of habitat. "Consolidated Rutile Limited recently added to their list of environmental disasters with major off-lease flooding from their Gordon operation. The Australian 13/11/96 reports: "The Borbidge Government yesterday threatened to cancel the lease of a giant sand mine on North Stradbroke Island near Brisbane after finding uncontrolled seepage into a sensitive environmental area. The Minister for Mines and Energy ... revealed Stradbroke Rutile, a subsidiary of Consolidated Rutile Limited, had breached environmental regulations by failing to implement adequate studies of the mine dredge path at its Gordon Mine on the island." '... the Minister ... decided "to neither cancel the lease nor impose the penalty." '... disregard for the facts and the long term implications of mineral sand-mining were swept under the carpet!! ... The Minister was not prepared to exercise his authority to follow through with his threat to stop mining at Gordon ...'*

Mining yields relatively little to the economy compared to tourism. And that is profit that can be made only once. When the mining inevitably finishes, what legacy will it leave? ...

I understand the divisions on Stradbroke Island about the benefits that sand mining delivers to this community. However, it is in the interests of any industry to promote the benefits they deliver, even if they are illusory. Unfortunately there is usually a lot of exaggeration of benefits.

For example, Bob Hawke was convinced by the timber industry that if logging on Fraser Island ceased, over 500 jobs would be lost. The Fitzgerald Inquiry into Fraser Island logging in 1991 thought that 500 was an overestimate, but that it would still be in the public interest to close down the timber industry even if it meant fully paying out those workers displaced. However, when all of those who were displaced and entitled to generous redundancy payments and retraining, etc, stepped up, *there were only 60 people.*

It isn't easy to identify how over a quarter of a billion dollars is generated for the economy and 2880 jobs are derived from Fraser Island tourism. After all, there are only about 350,000 visitor per annum. Apart from spending money plotting and preparing to get there ... [money is spent] in motor dealerships, fishing tackle and camping shops, motels and restaurants on the mainland, grocery retailers and those who provide tourist services on the island, who in turn have to be supported by a wide range of goods and services. The spending swirls around to the people who provide the housing and services, to those who supply the goods and services to the tourists. Fraser Island and whale watching have allowed the City of Hervey Bay to have the fastest growth of any coastal city in Queensland on a per capita basis.

The end of sand mining on Stradbroke Island wouldn't be a death knell. Providing it happens sooner rather than later, it will be the beginning of a better and more prosperous future for Minjerribah.

Mining was avoided on Moreton Island through a public inquiry. Mining on Fraser Island ceased as a result of the Fraser Island Environmental Inquiry, and logging stopped as a result of a thorough investigation by the Fitzgerald Fraser Island Inquiry. Inquiries are daunting and complicated but if they are well-conducted, they can sift through the complexities and have access to details not easily available, such as what is the exact value of the minerals gained, and what other benefits are there, and what are the legalities that need to be considered. They can quantify the rate of shrinking green space [and the increased numbers demanding access to green space]. *(This is an edited version of John Sinclair's talk.)*



Susan Martin, Jackie Cooper, Ellie Durbidge

## Another Unimin protest

At Brisbane Magistrates Court on 14 July, a group of islanders and supporters assembled to protest Unimin's theft of sand from NSI. The mining company was in court for a prosecution brought by the Department of Environment and Resource Management. Unimin is charged with not having required permits under the Integrated Planning Act, the Environmental Protection Act and the Forestry Act. Prosecution of Unimin by DERM will proceed on 7 September. Meanwhile, on 2 June, the Court of Appeal upheld the unanimous judgement written by the Chief Justice that Unimin's sale of sand to the building and landscape industries is unlawful. SIMO, FOSI and other groups are calling for Unimin to be charged additionally with indictable offences, including stealing and serious environmental harm.



## State MP's biased survey of island community views

Mark Robinson (LNP) distributed a survey to NSI residents in June. It purported to garner the community's views about national park and the island's economic future. Actually, what the survey presents is a version of what Mr Robinson (and the mining company) think should happen: more mining, less national park. Judge for yourself whether survey questions are impartial, and what they say about Mr Robinson: *'Prior to the Premier's announcement I was insufficiently consulted ...'* *'Sandmining should be allowed to continue as long as land is properly rehabilitated.'*

*'Sandmining should be allowed to continue as long as high value koala habitat is not destroyed.'*

*'The use of excess sand after mining to provide cheap sand and jobs in the construction industry of Southeast Queensland is a good thing.'*

*'A plan that provides 50% national park and allows mixed economic activity and conservation on the remaining 30% is a good alternative plan.'*

*'The direct and indirect job losses resulting from stopping sandmining will cause economic problems for the island.'*

Such propositions skew the survey into propaganda. An independent, disinterested body would have taken care to remove the anti-premier, anti-national park, pro-mining bias. The survey's dubious credibility is further undermined by having been wide open to rorting, with no hindrance on individuals filling out numerous survey forms: as they say, vote early, vote often. Mr Robinson claims nearly fifty per cent of island residents responded. But there is no way of knowing whether this is the case, or whether all returns were reliably recorded. Having written, distributed, sorted and adjudicated the survey, it's no surprise that Mr Robinson can claim that the results reinforce his starting position.

## Unimin dealing in misinformation, fear-mongering

Unimin's desperate campaign to remain on Stradbroke for the long term has stepped up. Via its newsletter, *The Sand Times*, and other circulated material, the company has vented extraordinary claims, warning of *'complete economic collapse on the island by ending productive mines early'* and suddenly claiming a further 100-200 years' more resources.

The mining company has often stated to SIMO that heavy minerals will be exhausted in 'about 15 years'. Yarraman was originally projected to run to 2011; Enterprise was to close in 2023. Silica mining has a longer timeframe. Might the 100-200 years of resources refer to the tailings stockpiles the company planned to sell as construction sand? Of course, that sand is required to be put back to re-form the post-mining landscape, particularly the 100m deep Enterprise void.

In 2009 CRL announced Yarraman would close in 2013, halving the workforce, and it had four years to plan for its workers: where are those plans? Where is the corporate responsibility?

Unimin Managing Director, Campbell Jones announces *'... The results [of recent polling commissioned by Unimin] demonstrated a high level of support for continuing the current level of mining, while also expanding national park. ... In fact 75% of respondents indicated that mining operations on the island should be allowed to continue in its current form.'*

But *The Courier-Mail's* June 2010 poll of 1747 people shows that **76.36 per cent agree with banning sand mining on NSI.**

## Wildlife encounters



Wandering Tattler



Dawn on Deadman's Beach.  
Point Lookout resident, Mike Hines, is an early bird. He is often on the beach first thing, camera ready for encounters with other early birds.



Eastern Reef Heron



Silver Gulls



Crested Terns



Masked Lapwings



Sooty Oyster Catchers

## Court stops sand removal

Conservation groups had a big win on 23 July when the Appeal Court – Supreme Court of Queensland – in a three to nil decision, found for co-respondents (including SIMO) and ended Queensland Construction Materials' appeal in the Planning and Environment Court. QCM (owned by CRL/Unimin) wanted to appeal Redland City Council's 2008 unanimous decision to reject an application to remove and sell non-mineral sand from its mining leases. The Council did not join the co-respondents in presenting three preliminary points.

Unimin is reported as saying it will submit a new application to remove (quarry) and sell sand from two mountainous stockpiles visible from Brisbane. This sand is required to re-form the post-mining landscape, in accordance with the conditions of the original lease. Unimin has unveiled its own 'sustainable' vision for Stradbroke, using the rhetoric du jour: 'strong', 'green', 'smart', 'healthy' and 'fair'. Details at [www.sustainable.stradbroke.com.au](http://www.sustainable.stradbroke.com.au). Unimin wants 'confirmed mining, extraction [read, quarrying the stockpiles] and sale rights ... in relation to building and construction sands for approval purposes (incorporating the resolution of permitting issues)' – in other words, call off the DERM prosecution of Unimin for removing sand from Vance unlawfully. Also they would like 'The continuation of the mining and extraction of silica sands from the Enterprise Mines area': this means that Unimin would move its silica operation to Enterprise. Unimin is attempting to horse-trade: give up mining Vance nine years early in return for having expired Enterprise leases renewed to 2027. This would see the huge pit of Enterprise and the massive damage it does continue for another 17 years in country earmarked national park – indeed the pristine high country that is the Kor-i-Noor of the national park.

## SIMO Newsletter July 1982

*'Aboriginal middens near the causeway south of Point Lookout were destroyed deliberately by sand miners.*

*Investigations by Department of Aboriginal and Islanders Affairs officers ... seem to confirm that such wantonly destructive action will not take place again. ... [But this action] has done nothing, however, to "punish" the offender in the first instance; nor will it restore the middens lost.'*

## Kangaroo roadkill at Point Lookout

Slowing the roads on NSI has been a priority of SIMO's for many years. Neither Main Roads nor Council has been sympathetic. But island roadkill incidents continue to be unacceptably high. This kangaroo was killed on East Coast Road at Point Lookout on 27 June 2010.

Jan Aldenhoven, who took the photo and helped carry the dead kangaroo across the main road, describes the event: 'Tourists at the Domain cafe on Sunday morning enjoyed watching this male roo feeding in the park for a couple of hours. Then they watched in horror as he tried to cross the road and was hit by a speeding car. He died after about ten minutes from the impact. He's one of the roos that has been living in the area for many years. He is probably around eight years old, in the prime of his life.'

SIMO is waiting for advice from RCC on how and when this road, and others, will be slowed down and made safe for wildlife and people.



## Eighteen Mile Swamp ...

Eighteen Mile Swamp has huge biological significance but it's also a place of great beauty. When viewed from the dunes on Main Beach late afternoon, the escarpment jumps up out of the plain of swamp looking dark and mysterious, salt spray swirling like mist, glimpses of vine forest pockets and palms. It looks wild country.

What would it be like to walk the whole length of the escarpment from the north to south of the island? Surely an adventure.

But then one remembers that right behind the escarpment is the vast Enterprise mine chewing its way through the ancient landscape. Now the bare ridges are visible even from the iconic Gorge Walk at Point Lookout, along with the scar of Yarraman. Eighteen Mile Swamp is supposed to become national park this year.

Surely it's wrong to keep mining along the ridges and valleys that feed into this special place? Imagine walking the escarpment, knowing that just through the trees, mining continues ...

## Straddie Vision

Comment extended to 30 September

The government is inviting comments on its vision for North Stradbroke Island: national park, the phasing out of mining and development of a sustainable green future. Refer to [www.derm.qld.gov.au/stradbroke/index.html](http://www.derm.qld.gov.au/stradbroke/index.html) SIMO encourages you to make a submission. See SIMO's guidelines, [www.simo-stradbroke.org](http://www.simo-stradbroke.org). Lodgement should be to: [straddievision@derm.qld.gov.au](mailto:straddievision@derm.qld.gov.au), and also send to the premier: [premier@ministerial.qld.gov.au](mailto:premier@ministerial.qld.gov.au).

## Halt mining on island

*Let's not trash the rest of North Stradbroke Island over the next 17 years and then declare it a national park. It will take hundreds of years before the land will recover to its original quality. Let's preserve this jewel and not renew the mining leases.*

Michael Dawson, Point Lookout  
Letter published in *The Courier-Mail*,  
3.8.2010

## SIMO Newsletter May 1996

*'Consolidated Rutile are planning to work their Ibis-Alpha Lease. This deposit stretches from the 18 Mile Swamp in the east, west to Moreton Bay, north to Black Snake Lagoon and south to Arawoolum. Mining this area will have an impact on Palm Valley and its associated wetlands to the east, Little Canalpin Creek catchments on the west coast, and seepage into the beautiful Ibis Lagoon complex which is proposed National Park.*

*'The western dune extending from Black Snake Lagoon to Arawoolum is the last remaining example of ancient overlaying dune systems that does not occur on either Moreton or Fraser Islands. The mining of the Gordon Deposit has already destroyed the southern dune system.*

*The Ibis-Alpha Deposit also lies within an area on the Australian Heritage Interim List and is adjacent to National Park proposals. ... ConRutile are being irresponsible in choosing to mine the environmentally significant Alpha-Ibis lease ...*

*'Despite the listing of the Mount Scott/ Mount Willes Areas as a Category 1 it has been destroyed by CRL's Gordon Mining operation. In view of Stradbroke's proximity to Brisbane and its potential for tourism, it would appear to be short sighted to destroy this irreplaceable resource. All efforts should be made to retain this landscape...'*

## A letter from Professor Carla Catterall

Professor Catterall, president of the Ecological Society of Australia, provides this sobering appraisal of the risk of failure of rehabilitated landscapes to meet desired outcomes in the long term. To put it simply, to date there is no science to demonstrate that the original biodiversity and ecosystem function can ever be reinstated. Further, there is a risk that rehabilitated landscapes are less resilient to stressors like fire, storm and climate change.

27 May 2010

### **Re: Ecological success of post-mining rehabilitation, with comment on North Stradbroke Island**

Dear Dr Aldenhoven

*Please find below a statement of my professional opinion relating to the above issue. I base this opinion on around 35 years' experience as a university-based ecological scientist, 25 of these spent working in the field of biodiversity and conservation in Queensland, and the past ten years as a leader of commonwealth-funded research programs and projects in ecosystem restoration.*

*The field of ecosystem restoration is currently in its infancy, something like the state of medical practice in the eighteenth century – attempts are being made which vary in their success but whose outcomes have not been subject to the kind of scientific scrutiny that is needed in order to be even moderately confident of a successful outcome. Furthermore, even in the most promising of situations, there is an extremely high risk that restoration will fail to produce the hoped-for outcomes within the expected time frame (ie, within a decade or two). Over longer periods, we simply don't know as the work has not been done.*

*For example early revegetation of sand-mined areas in eastern Australia involved the widespread planting of Bitou Bush, which then became a significant weed species invading natural areas along much of the east coast. Thankfully, post-mined practices have improved during the past three decades (for example, they focus on establishing locally-native rather than introduced plant species), but they would still fall a long way short of being able to replace the ecosystems that were present before mining.*

*Restoring an ecosystem requires the reinstatement of the full complement of pre-impact biodiversity. This encompasses both species diversity (including species of plants, worms, insects, birds, mammals etc) and the ecological processes which enable these species to persist in the longer term while maintaining resilience to natural disturbances (such as fire, storms and climate variation). Such processes include dispersal, nutrient cycling, pollination, food-chain maintenance and many others.*

*A scientific review of past attempts at restoring biodiversity and ecosystems (Hildebrand et al. 2005) concluded that there is a very high risk that restoration projects will fail to achieve their objectives. Common reasons for this include the following.*

1. *The "field of dreams" fallacy. For example, it is incorrect to assume that initial success in growing a limited number of plant species will eventually result in colonisation of the area by most of the desired species (the plants, animals and*

## SIMO membership

Thank you to those who have paid 2010/11 membership and beyond. And thank you also to those who have made generous donations to SIMO.

### SIMO membership

Single \$11.00

Family \$13.20

Concession/student \$5.50

Please send your membership application with contact details, mailing address and payment to:  
SIMO

PO Box 190

Point Lookout 4183

or pay by EFT: BSB 0641 38

Account number: 10137450

**If paying by EFTPOS, please identify your payment with your name.**

Enquiries about SIMO membership by email to [quinnbris@optusnet.com.au](mailto:quinnbris@optusnet.com.au).

## SIMO bandannas

Pure cotton bandannas in teal, burnt orange, royal blue, aqua, and pale orange are \$8.00 each (inc GST). Orders to SIMO.

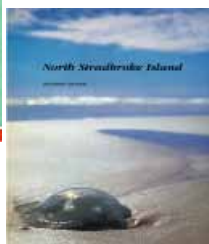
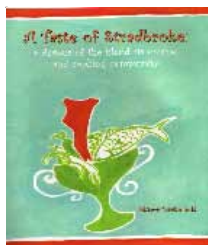


## SIMO books

SIMO derives an income from the sale of two special island books – Stradbroke classics:

**North Stradbroke Island** revised 2004 edition, \$25.80 inc GST, and **A Taste of Stradbroke. A flavour of the island, its cuisine and cooking community** \$15 inc GST, or \$10 each for three copies.

**Add \$9 postage to orders.**



microbes of the original ecosystem). Many species lack the movement and dispersal capabilities to move to these areas in sufficient numbers for restoration of their populations.

2. The “carbon copy” myth. For example, it is not possible to copy an original ecosystem in situations where the physical properties of an area have changed (e.g., where soil nutrients or hydrological processes have been altered, as in the case of sand mining).
3. The “fast forward” myth. For example, natural forest ecosystems take centuries to redevelop after large-scale disturbance, and there is no proof that restoration actions will be able to significantly accelerate this.

My own research into the use of replanted rainforest sites by birds, reptiles and insects has shown that, while ecological development looks encouraging in the first decade (with apparently around 50% recovery after 10 years), there is a substantial risk that many sites may never regain the other 50% of biodiversity, and at best it will require many further decades (e.g., see Catterall et al. 2008).

In the case of post-mining restoration of natural ecosystems to sand deposits of coastal south-east Queensland, the failure risk is far higher, due to the unusual soil nutrient requirements of many plant species and the relatively poor ecological understanding of the fauna and flora. If the restored eco-system only partially resembles the original, there is a further risk that it may lack resilience to fire, storms and climate change.

In mainland regions, where large areas of land are currently degraded as a result of previous land uses, there are various useful attempts currently under way at restoration, and these are likely to produce a net ecological benefit in spite of their uncertainty of full success. However in areas which currently support important natural or near-natural vegetation the most likely outcome from removing the vegetation and soil structure, and then attempting to restore them, is a large net loss of ecological value, because this restoration will fall short of the previous natural community.

With respect to North Stradbroke Island in particular, there is currently a spatial mix of substantial areas of intact native habitat with other areas that were previously sand-mined and partially restored. Their mix retains the potential to sustain the island's biodiversity in the longer term: the large intact areas can provide a source of species to progressively recolonise the partly-restored areas. However, if the total area of intact vegetation is reduced, together with further mining of other areas, there is a considerably great risk that the island's ecological values will be irreversibly degraded over time.

Yours sincerely

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### References cited

1. Hildebrand, R.H. et al. 2003. The myths of restoration ecology. *Ecology and Society* 10: 19. (online at <http://www.ecologyandsociety.org/vol10/iss1/art19/>)
2. Catterall, C.P., et al. 2008. Biodiversity and new forests: interacting processes, prospects and pitfalls of rainforest restoration. Pp510-525 in: Stork, N. and Turton, S. (eds) *Living in a Dynamic Tropical Forest Landscape*. Wiley-Blackwell, Oxford