PROFILE OF THE ILLEGAL ABALONE FISHERY IN SOUTH AFRICA:

Is a Sustainable, Legal Fishery Achievable?

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Sources:

- Raemaekers S. and Britz P.J. In review. Profile of the Illegal Abalone Fishery (*Haliotis midae*) in the Eastern Cape Province, South Africa: Organised Pillage and Management Failure. ICES Journal of Marine Science

- Raemaekers S., Hauck M., Britz P.J., Bürgener M., Mackenzie M., Maharaj G. and Pláganyi E. In prep. The ‘legal’ and ‘illegal’ abalone fisheries in South Africa: the Challenge of Establishing Legitimate Fishing Rights
Minister Closes Abalone Fishery

"We are unfortunately at a point where the commercial harvesting of wild abalone can no longer be justified because the stock has declined to such an extent that the resource is threatened with commercial extinction,"

Perlemoen: South African abalone
South African Abalone

Range of abalone $H. \text{Midae}$

Commercial Fishery

Eastern Cape Province

Western Cape Province

Transkei

Port Elizabeth

Cape Town

South Africa
Rise of Illegal Fishing – mid nineties

- Legitimacy of fishing rights redistribution
- Rise in abalone price
- Organised crime networks penetrate S.Africa
- Porous borders
- Rand/ Dollar exchange rate

Drug connection

“Tik” methamphetamine
A Legal Fishery Becomes Illegal

By 2008 All abalone fishing rights annulled

- TAC and Quota’s 1968-2008
- Failed “TURF” policy
- Recreational fishery closure 2003
- Subsistence exemptions 1998-2000
- Limited Commercial rights closure 2001 - 2004

- BUT.... South African Abalone Production is Greater than ever before due to illegal fishing and aquaculture
Abalone legal fisheries & Commercial TAC

Open access: overharvesting

1st Catch Regulations

Stable TAC CPUE

Illegal fishing Rights reform Destabilises Fishery

IUU Take?
Abalone legal fisheries & farm production

- **Commercial**
- **Subsistence**
- **Limited Commercial**
- **Recreational**
- **Aquaculture production**

Aquaculture Grows
"Legal abalone" from South Africa

Confiscations rise

- Commercial
- Subsistence
- Limited Commercial
- Recreational
- Aquaculture production
- Confiscations from Western Cape and Unknown
- Confiscations from Eastern Cape
South African Abalone Production booms

Reported Global Abalone Fishery Production 2006: 8850 tons
South African Abalone

Range of H. Midae

Commercial Fishery

Study area

Eastern Cape Province

Range of H. Midae

Western Cape Province

Transkei

Cape Town

Port Elizabeth
Methodology

- Semi-structured interviews
  - Poachers, law enforcement and stakeholders
- Quantitative data:
  - Abalone confiscations and arrest records
  - Indicators of efforts: vessel counts, scuba fillings, etc.
  - Resource data: Abalone size trends, dive transects
- Participatory observations
  - Snapshot survey, patrols, busts, court cases, launch sites
Illegal Fishery Profile: E.Cape

- Rural shore based fishers – traditional Xhosa communities
- Port Elizabeth Metropole Shore Based – urban, white, Afrikaans speaking males
- Boat based fishery - urban, white, Afrikaans speaking males
Demographics and behaviour

- Predominantly white, Afrikaans speaking males aged 16-55
- Majority unemployed or blue collar workers
- “Lifestyle”, not “livelihood” – some quit regular jobs
- “Robin Hood” enterprise – divers felt marginalised by post-Apartheid affirmative action policies
Shore Based Fishery

- Opportunistic
- Low capital
- Low yield

Police, residents, hamstrung by legalities, can only watch helplessly as divers plunder sea bed.

Brazen poachers

Arrested “runner”
Boat Based Abalone Fishery

- Fully commercial fishery
- Highly organised networks
- Fleet of 30 “superducks” – investment of >US$4 million
- 300 Divers
- Yield:
  - 80-150 kg meat / diver/ trip
  - 0.5-1.5 ton meat/ boat/trip

Bird Island MPA
10-12 boats/day

“Abalone Superduck”

Perlemoen poaching off Bird Island ‘out of control’
Up to 15 rubber ducks launched from public slipway in PE harbour most evenings

By Lauren Cohen
Economics of the Eastern Cape Abalone Fishery

- **Price:** 40-65 $ / kg meat to divers
- **Income:** $40,000 – $60,000 / boat/ day up to $6000/ diver/ day
- **Harvest:** 1000 – 2000 ton per annum
- **Value:**
  - **Divers:** $ 13 - 26 million p.a.
  - **Export:** $ 35- 70 million p.a.
Compliance Failure

- Boat Based Poachers face minimal chance of arrest
- Confiscated Abalone: < 1% by Fishery Officials

**Fisheries Patrol Vessels**

$6 million x 3 in 2004/5
4. Resource effects

- Reduced density
- Reduced Average Size
- Evidence of resilience under heavy fishing pressure, but collapse inevitable
Fishery Management Failure

- No rights issued in Eastern Cape – a missed opportunity?
- Western Cape – Still a productive resource but failure of fishing rights regime and compliance measures.
- Legitimacy problems with quota based management.

Management Options?

- **Business as Usual**: Close legal fishery, increase compliance effort, wait for resource recovery – inevitable illegal fishery collapse, loss of socio-economic benefit, ecological collapse, alienation of stakeholders.
- **Strengthen property rights**: Incentive based participation. Exclusive TURF’s, ranching. - immediate socio-economic return. State/private sector/community partnerships essential. Equity issues?
- **Draft policy on abalone ranching TURF’s** published 2008
Acknowledgements

- Brian Godfrey
- Roget Fox - Ndlambe Environmental Protection
- Military Intelligence
- George Kant – Marine and Coastal Management
- Marine Living Resources Fund - Marine and Coastal Management