



**SANFORD LIMITED**  
SUSTAINABLE SEAFOOD



# Sustainable Development Report 2009

From sea to food – over 100 years of sustained growth



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# Management Directory

## Head Office

E F Barratt	<i>Managing Director</i>
V H Wilkinson	<i>Business Development Manager</i>
G L McNamara	<i>Company Secretary/Quota Manager</i>
D C McIntosh	<i>Finance Manager</i>
D J Evans	<i>Accounting &amp; Systems Manager</i>
A I Bond	<i>Industry Liaison Manager</i>
A M Wood	<i>Environmental Systems Manager</i>

## Marketing

G J Burke	<i>Market Manager Europe</i>
P B Cox	<i>Market Manager Americas</i>
M J Comber	<i>Market Manager Asia</i>
S Kirschberg	<i>Market Manager Fresh Chilled, Australia &amp; Oceania</i>
D K Cawdron	<i>Logistics Manager</i>
D A Stewart	<i>Shipping Co-ordinator</i>
K M Thompson	<i>Quality Manager</i>
S Jaganathan	<i>Food Safety Co-ordinator</i>

## Inshore Fishing and Processing

S L Walsh	<i>Division Manager</i>
R S Zhang	<i>Accountant</i>

### Auckland

T Searle	<i>Auckland Fish Market Manager</i>
J M Cooper	<i>Auckland Fish Market Seafood School Manager</i>
J H Fitzgerald	<i>Vessel Manager</i>
M E Hall	<i>Production Manager</i>
B D Stubbs	<i>Services Manager</i>

### Tauranga

S D Keeves	<i>Manager</i>
D C Cowdrey	<i>Fleet Supervisor</i>
J R Steere	<i>Sales Manager</i>
D N Anderson	<i>ECS Coldstores Manager</i>

### Timaru

B J Keelty	<i>Manager</i>
J W Routhan	<i>Processing Manager</i>
S Brown	<i>San Won Limited Manager</i>

## Deepwater Fishing

G L Johansson	<i>Division Manager</i>
J P Martyn	<i>Accountant</i>
S C Coles	<i>Charter Manager</i>
A D Adamson	<i>Quota Manager</i>
D J Shaw	<i>Longline Fleet Manager</i>
S Collier	<i>Freezer Vessel Manager</i>
S J Gibb	<i>Freezer Vessel Manager</i>
L A Cowan	<i>Freezer Vessel Manager</i>
D C Woods	<i>Freezer Vessel Manager</i>
D V Jurasovich	<i>Freezer Vessel Manager</i>
D M Craig	<i>Engineering Manager</i>



## Aquaculture

E J Culley	<i>Division Manager</i>
B W Champion	<i>Accountant</i>

### Havelock

W R MacDonald	<i>Manager</i>
D Herbert	<i>Marine Farm Manager</i>
S J Gibb	<i>Factory Manager</i>
P McCaffrey	<i>Branch Engineer</i>

### Kaeo

P J Harris	<i>Manager</i>
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### Coromandel

J C Barr	<i>Marine Farm Manager</i>
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### Bluff

T M Foggo	<i>Manager</i>
W J Crighton	<i>Assistant Manager</i>
S Ramsay	<i>Fish Factory Manager</i>
N W Smith	<i>Mussel Factory Manager</i>
A R MacDonald	<i>Salmon Farm Manager</i>
S Marwick	<i>Mussel Farm Manager</i>
P M Buxton	<i>Hatchery Manager</i>

## International Fishing

T B Birdsall	<i>Division Manager</i>
I D Scroggie	<i>Australia, General Manager</i>

## International Purse Seiners

M C de Beer	<i>Pacific Tuna Manager</i>
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## International China

A C Stanley	<i>China Manager</i>
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Cover Image: New salmon farm system in Big Glory Bay, Stewart Island.

Sanford has again benefited from our sustainable business strategy and operational commitment to managing the transition to a more sustainable (low-carbon) economy. We have survived a very tough time for exporters and continued our ongoing investment in research. Where possible, external sustainability accreditation has been achieved to verify business practices and operations. The business is profitable and efficient with a long-term horizon and invests strategically in its sustainable future and innovation. Communities within which the business is located, or upon which it has influence are invested in financially and through time. Opportunities, such as this report, are taken to publicly communicate sustainability successes and ongoing challenges, thus increasing transparency and accountability.

Each year we have the opportunity to update our various stakeholders on how we are addressing the variety of challenges our business faces. Our primary business purpose is to meet market demand for high quality, safe and healthy seafood products in an economically sustainable way. This requires committing substantial capital expenditure and driving continuous innovation to ensure fish stocks are maintained, while ensuring the health, safety and well-being of our employees and others, and constantly reducing our environmental footprint.

Sanford has long recognised that business sustainability is a key competitive issue, which is increasingly becoming a differentiator between those who succeed and those who do not. It is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

With the slowing of the worldwide economy and the subsidence of financial markets, 2009 was a turbulent year for businesses and consumers alike. For many companies, the current global economic climate has produced a particularly challenging environment in which to operate. It has also produced a challenge for sustainability. Sustainable development is, after all, about economic growth as well as improved quality of life, environmental stewardship and zero net depletion of resources. Sanford, however, continued with the challenge of progressing truly sustainable operations, taking environmental, social and economic values into account.

Integration of sustainability into business practice presents a number of significant challenges, one of which is the definition of sustainability itself. Many businesses still consider sustainability in terms of the environmental impacts alone. With environmental awareness at an all-time high and the economy at an all-time low, it is vital that Sanford continues to make each business decision a sustainable decision; this is a commitment that is underpinned by the [Sustainability Policy](#).

The New Zealand Emissions Trading Scheme (NZ ETS) will require many companies to start reporting greenhouse gas emissions, energy consumption, production figures and associated performance data. Sanford has made this information publicly available for a number of years now, and benefits from the open dialogue with its stakeholders. The specific monetary impacts of the NZ ETS are still unknown but are likely to have a significant economic effect.

As a sustainable fishing company, we are acutely aware of the need to secure the long-term future of our ocean's well-being. The responsibly managed wild fish stocks comprising the New Zealand Quota Management System (QMS), combined with our increasing sustainable aquaculture investments, allow Sanford to take advantage of renewable sources of food.

Sanford continues to regard the interrelationship between economic stability, environmental impacts and the subsequent influence on people's daily lives as significant. Behaving in a socially responsible manner towards our employees and those communities in which we operate remains fundamental to the sustainability of Sanford.

Sanford corresponds with our stakeholders by charting our progress in this report and in our [2009 Annual Report](#). Again, defining the report content, including the materiality of topics, was a process of collaboration and consensus involving the executive team. We aim to report items of relevance including the outcomes of our activities during the 2009 financial year.

*"We thrive and survive on planet earth as a single human family. And one of our main responsibilities is to leave to successor generations a sustainable future."*

Secretary-General Kofi A. Annan

## Managing Director's Statement

Welcome to Sanford's 2009 Sustainable Development Report. This is our tenth report, intended to provide our varied stakeholders with information on the progress we have made during the year towards our commitment to sustainability and any relevant issues that impact on us as a fishing company operating in New Zealand.

Considering the worldwide financial turbulence of this year, we believe that there is substantial advantage to being an industry leader in sustainable practices. We regard sustainable development as a vital aspect of our business ethos and value reporting on progress made as an important part of that process. The business case for sustainability continues to be made by:

- Encouraging customer and consumer loyalty through supply reliability, and committing to process improvement and long-term returns
- Increasing supplier commitment to sustainable development principles
- Maintaining and enhancing community relationships
- Reducing environmental impacts and increasing resource efficiency
- Providing confidence to regulators, banks, insurers and financial markets
- Attracting and retaining loyal and committed employees.

Our ISO 14001-certified Environmental Management System involves setting annual objectives and reviewing them to ensure continuous improvement is made. Each plant is responsible for setting key performance indicators and measuring progress against them. This means we remain focused on sustainability through measured business decisions and efficiency initiatives, which in turn ensures the continued success of the Company. We aim to clearly report our progress in sustainability, but also recognise the importance of disclosing any targets we have not achieved and the associated causes.

The fluctuating value of the New Zealand dollar has the potential to affect our profit margin as an export company. This means we continually investigate economically sustainable growth options to ensure any impacts are capitalised on or at least minimised. We also recognise the value of less-tangible aspects of our operation, such as our employees and the spectacular New Zealand environment. Accordingly, we aim to be a responsible company by being accountable for any impacts our operations may have, communicating with our stakeholders and operating in a transparent manner.

We continually strive to lead and influence the focus on sustainable development in both the New Zealand seafood industry and the wider community.

I hope you find our report a useful resource.



**E F Barratt**  
*Managing Director*

7 December 2009



## A Brief History of Sustainability Reporting at Sanford

- 2000**
  - Triple Bottom Line Report is published for the first time
  - The report includes a draft Sustainability Strategy
  - Sanford gains ISO 14001 certification of four New Zealand plants (the remainder are certified in 2001)
- 2001**
  - New Zealand hoki fishery is certified by the Marine Stewardship Council
  - Sanford Kaeo forms an education enhancement partnership with the Kiwi Can programme
  - Sanford expands into the Western Pacific with the purchase of two Purse Seine fishing vessels
- 2002**
  - Sanford is the first company to sign the innovative New Zealand Seafood Industry Charter
  - Closure of the Nelson operation results in addressing employment and community issues
  - Significant investment in the upgrade of the Havelock and Auckland processing facilities
- 2003**
  - Sustainable Development Report supersedes the Triple Bottom Line Report
  - Electricity eco-efficiency initiatives save \$270,000
  - Toothfish operations expand to include fishing in South Georgia
- 2004**
  - Completion of the Auckland Fish Market as a LEED-certified green building
  - Support of the 44% reduction in the hoki fishery quota for the 2004/05 fishing year
  - Investment in China through a 25% stake in Weihai Dong Won Food Company Limited
- 2005**
  - Sustainable Development Report is externally verified for the first time
  - Increased investment in China operation from 25% to 40%
  - Sanford supports continuation of hoki 100,000-tonne Total Allowable Commercial Catch (TACC)
- 2006**
  - New Zealand Institute of Chartered Accountants reporting award (and 2007; joint winner 2008)
  - Investment in fuel-efficiency equipment for the fleet
  - Involvement in the Benthic Protection Areas proposal designed to protect benthic biodiversity
- 2007**
  - Achievement of a C+ grade against the Global Reporting Initiative reporting criteria
  - Support for the reduction of the hoki fishery quota for the 2007/08 year
  - Successful promotion of the Auckland Seafood Festival as carbon neutral
- 2008**
  - [Sustainability Policy](#) developed
  - Purchase of the Jones Group assets including quota; expansion of our product range
  - Successful aversion of potential oil spill from the grounded San Cuvier
- 2009**
  - Conversion of Deepwater Fleet to light fuel oil
  - National Kiwi Can sponsor; new Environment and the Community lessons in schools
  - Participation in an industry project on carbon footprinting

## Sustainable Development Reporting Scope

Sanford's activities in New Zealand are organised in three main business divisions: Aquaculture covers marine farms and processing; Deepwater spans the catching of deepwater species and on-board processing; Inshore consists of fishing for inshore species and on-shore processing. Each division is accounted for in this report.

Sanford's main input is of fish and shellfish harvested in New Zealand's Exclusive Economic Zone (EEZ) under the New Zealand Quota Management System. Other inputs include seafood from aquaculture marine farms, fish from international waters, water, fuel, electricity and refrigerants. Sanford supplies a range of finished products to various customers around the world. The resources required for the transportation of these products fall outside our reporting boundary.

For the report boundaries, we chose to include those business units with a threshold of 50% ownership, summarised in Table 1. Economic data encompasses the Sanford Group of Companies as listed below. The social sustainability information includes staff employed in activities wholly owned by Sanford. This year we have also included part data on the businesses that we operate as 50% ventures. Environmental resource use is included at 100% for those activities wholly owned and operated by Sanford and at the percentage ownership for those operations at least 50% owned. Charter vessel resource usage is not included as quota is obtained from them as part of the supply chain and we do not have operational control over their resource use.

Legal entity	% Ownership	Environmental	Social	Economic
<b>New Zealand Company</b>				
Sanford Limited	100%	✓	✓	✓
Kaeo (includes Houhora, Whangaroa and Kerikeri)	100%	✓	✓	✓
Auckland (includes Head Office, Seafood School and Service division)	100%	✓	✓	✓
Coromandel	100%	✓	✓	✓
Tauranga (includes Export Cool Stores)	100%	✓	✓	✓
Havelock	100%	✓	✓	✓
Timaru – Inshore (includes Oamaru)	100%	✓	✓	✓
Timaru – Deepwater Fleet	100%	✓ <sup>1</sup>	✓ <sup>2</sup>	✓
Bluff (includes Stewart Island, Kaitangata and Waitaki)	100%	✓	✓	✓
International Pacific Tuna Fleet	100%	✓	✓ <sup>3</sup>	✓
<b>New Zealand Subsidiary Companies</b>				
Sanford Investments Limited	100%	✗	✗	✓ <sup>4</sup>
Auckland Fish Market Limited	100%	✓	✓	✓
Auckland Fishing Port Limited	67%	✗	✗	✓ <sup>4</sup>
<b>Australia Subsidiary Companies</b>				
Sanford Australia Pty Limited	100%	✓	✓ <sup>3</sup>	✓
Primestone Nominees Pty Limited	75%	✗	✓ <sup>3</sup>	✓
<b>New Zealand Associate Companies</b>				
The Big Picture Auckland Limited	50%	✓ <sup>6</sup>	✓	✓
San Won Limited	50%	✓ <sup>7</sup>	✓	✓
SS Fishing Limited	50%	✗	✗	✓ <sup>4</sup>
<b>China Associate Company</b>				
Weihai Dong Won Food Company Limited	50%	✓ <sup>8</sup>	✓ <sup>3</sup>	✓
<b>Sustainable Development Reporting Scope</b>				

TABLE 1

1. Charter vessels not included.

2. Staff numbers, gender, ethnicity only.

3. Staff numbers only.

4. Non-operating company – revenue included only.

5. Company trading as Cicerello & Backhouse. No resource use as trading company only.

6. Resource use should be reported at 50% but combined with Auckland Fish Market as shared premise and lower user.

7. Resource use reported at 50% in 2009 – incorrectly included at 100% in 2008.

8. Resource use reported at 50% in 2009 for the first time.

Note: Those companies in which Sanford has less than 50% financial interest are not included here but any revenue gained is included in the economic figures reported.

## 2008 Case Study Updates

[Weihai Dong Won Food Company Limited, China](#) investment by Sanford increased in April 2009 from 40% to 50% making it a 50/50 joint venture with Dong Won Fisheries Company of Korea. The business is an added value seafood processing plant located in the export processing zone of the coastal city of Weihai, on the north-eastern Shandong peninsula. The plant processes fish sourced from New Zealand, and other countries, into added value products that are exported to other parts of Asia, Europe, America, Australia and New Zealand. Sanford has progressively increased its investment in the plant from 25% and believes that the joint venture shareholding structure will allow the business to further develop its processing capabilities and lead to better long-term decision-making. Last year we reported on the sustainability impacts of Weihai in a case study. This year their resource use has been incorporated into the Sanford Environmental Profile at 50%, to reflect ownership.

[Alternative Fuel Sources](#) are needed to combat the fuel costs that continue to form a significant proportion of the operating expenses in the fishing industry. To be sustainable, fuel efficiency measures need to be combined with investigation into alternative fuel sources. This year all three Deepwater Fleet factory trawlers underwent modifications in order to be converted to light fuel oil (LFO) in their main engines. LFO is a blend of heavier fuel oil and diesel that trades more cheaply than does diesel, meaning the economic benefit that was predicted is being achieved.

In New Zealand, unlike the rest of the world, large domestic factory vessels have historically used diesel fuel. This was driven by the greater availability (supply and volume) of diesel compared with LFOs in most ports around New Zealand and by the fact that the Norwegian factory vessels predominantly purchased for use in New Zealand were originally designed to run only on diesel. This Sanford conversion project was significant in prompting the establishment of a LFO supply facility at the Port of Timaru. This now allows LFO charter vessels that previously could not fuel there to operate more frequently out of Timaru, utilising both the San Won cold store and local supply services, thus increasing Timaru business.

Initiatives in reducing fuel usage also continue. Gaining a better understanding of energy consumption through monitoring can assist in controlling fuel usage and help the Company to make informed decisions on energy-reduction investments. The success of trialling Motec, a data-acquisition programme, on the San Discovery last year has led to the decision to install it across all Deepwater Fleet vessels. The system, designed to optimise the efficiency of racing cars via real-time data acquisition and engine-management technology, records fuel usage, along with other vessel operational variable inputs (e.g. speed, pitch, RPM, wind direction, trawl gear set-up) to allow an in-depth analysis and comparison of varying fishing scenarios. It helps identify which initiatives (i.e. fuel additives, various configurations of trawl gear, skipper differences, vessel trim and steaming speeds) optimise energy use and therefore fuel efficiency.

The energy required to run a vessel (i.e. lights, refrigeration and hydraulic systems) also involves a considerable use of fuel. Better utilisation of energy can result in significant fuel savings. As an example, the next time the San Waitaki is in port, power meters will be installed on the refrigeration plant to record benchmark data which will then allow analysis for potential modifications of the operating configuration of the refrigeration system, such as increasing the main hold temperature to a more energy-efficient level while maintaining New Zealand Food Standards Authority (NZFSA) requirements.

[Sustainability Certification, Reporting and Benchmarking](#) global trends show heightened environmental awareness and consumer consciousness, which see companies facing new expectations for communication. To support food processors with their distinctive reporting needs, GRI convened a working group to develop a Food Processing Sector Supplement. Workshops were held in Sydney (which Sanford attended), Chicago and London. Overall, the outcomes were positive and generated meaningful observations. Many of the comments raised by the seafood stakeholders have been addressed by GRI such as:

- Biodiversity
- Traceability
- Wild and farmed sourcing
- Animal welfare
- Recognised sourcing standards.



The opportunity for public feedback on the final draft supplement opened in mid-2009 with the new GRI Food Processing Specific Guidelines for sustainability reporting due for launch in Feb 2010. More information is available at [www.globalreporting.org](http://www.globalreporting.org)

Sanford again took part in the Carbon Disclosure Project survey (CDP7) in March 2009. More information is available at [www.cdproject.net](http://www.cdproject.net)

**Maui's and Hector's Dolphin Regulations** were implemented on 1 October 2008, further restricting access to valuable inshore fishing grounds around the New Zealand coast. Sanford did not support the extensive fishing closures as our fleet was already spatially separated from where the dolphins are known to live, with protection already provided for the dolphins under existing measures. Since 2003, no Maui's dolphins have been caught by commercial set nets, and no Maui's dolphins have ever been caught by a trawl vessel. The new regulations have had a real effect on inshore set net commercial fishers and have increased costs on Sanford trawl vessel operations (extra fuel for travelling further to fish, and Ministry of Fisheries (MFish) industry levies for observer coverage monitoring if any interactions with dolphins occur).

This year the Seafood Industry Council (SeaFIC) co-ordinated a judicial review, in response to these unwarranted and costly regulations. The High Court granted interim relief to some set net fisheries while this review was being considered. Of particular interest to Sanford was the review of the trawl vessel observer coverage. We queried the value of future observer coverage given that the new regulations have driven trawl fishing further off-shore and further outside known dolphin habitats. The Court heard the industry judicial review in June. No decision has yet been released. Meanwhile, existing set net voluntary codes of practice are being updated to ensure that fishing practices continue to prevent interactions with the reputable dolphins.

It should be noted that Sanford does not use set-netting as a fishing method. For information on specific area regulations, please visit [www.fish.govt.nz](http://www.fish.govt.nz)

**Kahawai Legal Challenge.** The Supreme Court's judgement, released in May 2009, confirmed that no sector has priority over any other sector in New Zealand's fisheries management system. Sustainable resource use requires that when Total Allowable Catch (TAC) levels are determined for a QMS fish stock, they are fully allocated among competing users. The next challenge will be the determination of "value" of the resource for each competing sector and the weighting a Minister gives when allocating the TAC. MFish has advised that they intend to release an initial position paper to consider the sustainability and utilisation of kahawai stocks, for implementation of any possible changes on 1 October 2010.

**Auckland Waterfront Changes** are currently being negotiated by Sanford to ensure the proposed plans do not adversely impact on the historical maritime use of the area. We want to make certain that Sea + City's objective to create a world-class, mixed-use urban waterfront redevelopment does not impinge on Sanford's objective to protect the interests of the fishing industry and associated businesses within the Wynyard Quarter. International experience has shown that to make the Auckland waterfront a world-class destination for people, it is essential to retain the vibrancy and atmosphere of the working waterfront. The port, marine and fishing industries which have shaped the economic success of Auckland will continue to be vital for the region's economy in its future.



View of the Vital Waterfront with Sanford Auckland marked

## Environmental Sustainability

Sanford has again focused our sustainable business strategy and operational commitment to managing the transition to a more sustainable (low-carbon) economy. We use various natural resources for energy and transport, water for processing and refrigerants for storage. We continually look for options by which we can reduce our use of these resources and in turn minimise our environmental footprint.

*“The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.”*

Theodore Roosevelt

### Sanford Snapshots

- We included our 50% joint venture operations in our environmental profile
- We gained triennial ISO 14001 certification of our Environmental Management System
- We took part in an industry project on carbon footprinting



## Environmental Sustainability

### Environmental Profile

It is essential during times of economic downturn to increase resource efficiency. Resource costs will continue to increase over time. It is vital that companies increase energy and water efficiencies and move towards a low carbon footprint on a business-wide and product basis. Measures of our key performance indicators for environmental sustainability are summarised in Table 2. We evaluate our performance by the use of eco-efficiency values, which are a ratio of the resource consumed compared to the total product produced. A lower eco-efficiency indicates the resource is being more efficiently utilised. Annual evaluation is a practical means of measuring the progress made in sustainable initiatives. Minimisation of resource consumption remains a key focus for all operations; however, changes in the types of species processed and the corresponding production techniques can affect eco-efficiency comparison.

This year we again included the production and resource use from our Australia and Pacific Tuna Fleet (PTF) operations. Also we included joint ventures at 50% of usage reflecting the percentage ownership. The eco-efficiencies for electricity and water are calculated on inshore processing production, product unloaded from deepwater freezer vessels and the total weight of fish sold at Auckland and Melbourne Fish Markets. This is because electricity and water are used only on land. The diesel and greenhouse gas (GHG) eco-efficiencies are calculated using the total production including the fish landed by the PTF as diesel is predominately used at sea.

Although our eco-efficiencies remained relatively constant, we did not achieve the targets set for 2009. Changes in reporting and a decrease in production both had an effect on the outcomes. Because of this, the targets set for 2009 remain unchanged for 2010, except for the solid waste target which is a 5% reduction of the 2009 actual.

	Unit	2005	2006	2007	2008	2009	Target 2009	Target met	Change from previous FY	Percentage change	Target 2010
Product produced <sup>1</sup>	tonnes	55,744	49,264	50,439	82,991	82,339			(652)	(0.8%)	
Fishmeal produced <sup>2</sup>	tonnes	1,112	1,182	895	1,130	886			(244)	(21.6%)	
Total produced	tonnes	56,856	50,446	51,334	84,121	83,225			(896)	(1.1%)	
Electricity consumed <sup>3</sup>	kWhrs	23,173,227	23,987,910	23,915,880	24,491,708	25,911,076			1,419,369	5.8%	
Eco-efficiency (electricity)	kWhrs/kg product	0.4076	0.4755	0.4659	0.3803	0.3977	0.3708	✗	0.0174	4.6%	0.3708
Water used <sup>3</sup>	m <sup>3</sup>	695,407	667,239	591,356	713,001	757,472			44,471	6.2%	
Eco-efficiency (water)	l/kg product	12.23	13.23	11.52	11.07	11.63	10.79	✗	0.5552	5.0%	10.79
Solid waste produced <sup>4</sup>	m <sup>3</sup>					2143					
Eco-efficiency (waste)	m <sup>3</sup> /kg product					0.0329					0.0313
Coal consumed	kg	689,070	614,539	418,000	502,340	560,420			58,080	11.6%	
Eco-efficiency (coal) <sup>5</sup>	kg/kg fishmeal	0.6194	0.5200	0.4669	0.4446	0.6328	0.4401	✗	0.1882	42.3%	0.4401
Diesel consumed	litres	21,296,606	19,299,241	18,341,852	28,032,781	27,054,288			(978,493)	(3.5%)	
Eco-efficiency (diesel)	l/kg product	0.3746	0.3826	0.3573	0.3378	0.3286	0.3169	✗	(0.0092)	(2.7%)	0.3169
GHG emitted	tonnes CO <sub>2</sub> -e	65,849	61,450	60,339	83,910	82,554			(1,356)	(1.6%)	
Eco-efficiency (GHG) <sup>6</sup>	kg/kg product	1.16	1.22	1.18	1.00	1.10	0.97	✗	0.1019	10.2%	0.97
Lube oil used	litres	97,645	90,188	98,373	123,187	105,307			(17,880)	(14.5%)	
Lube oil recycled <sup>7</sup>	litres	56,060	48,035	55,275	99,399	55,493			(43,906)	(44.2%)	
Recycled as % of total	%	57	53	56	81	53	>69	✗			>69

TABLE 2

#### Environmental Profile

- Includes 50% of Weihai Dong Won Food Company Limited (WDWF) and San Won 2009 data.
- Fishmeal produced in Timaru fishmeal plant.
- Includes 50% of WDWF and San Won 2009 data. Eco-efficiency calculated on product produced, excluding Pacific Tuna Fleet data.
- Solid waste was measured in m<sup>3</sup> in 2009 meaning previous figures are not comparable. It does not include Pacific Tuna Fleet, Sanford Australia or WDWF data.
- Coal eco-efficiency calculated on Timaru fishmeal produced only. Eco-efficiency calculated on product produced, including Pacific Tuna Fleet.
- GHG eco-efficiency calculated on total product, excluding Sanford Australia and WDWF.
- Lube oil recycled is based on estimated figures and does not include Pacific Tuna Fleet, Sanford Australia or WDWF data.

## Environmental Sustainability

### Total Production

There was a slight overall decrease in finished product during the year. A significant portion of the total production is attributed to the addition of 50% of Weihai's production. Conversely San Won production was added at only 50% this year compared to 100% in previous years. There were decreases in Tauranga processing and Pacific Tuna Fleet catch, both of which are a significant contribution to the total value. There was a reduction in Timaru fishmeal plant production by over 20%. The resultant amount is more comparable to the 2007 value. There was a significant increase in mussel production at Havelock and both mussel and salmon production in Bluff.

### Electricity Consumption

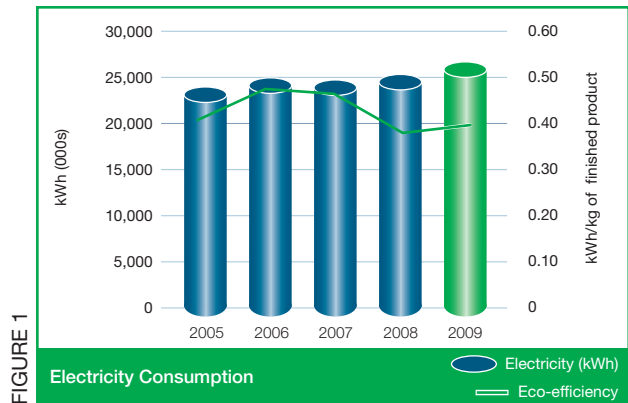
This year we had a slight increase in our eco-efficiency due to the small decrease in production. There was also a minor overall increase in electricity use, as shown in Figure 1. This is despite a significant contribution with the addition of 50% of Weihai's electricity use. There was a sizeable increase in Bluff electricity use due to the increased production. Kaeo had reduced usage reflecting a decrease in production. Timaru fishmeal plant encountered a marked increase in electricity usage.

Sanford Timaru has had funding approved by the Board to install heat exchangers next year. This will result in a number of benefits including the removal of the existing diesel tank and boiler. The system will be designed to heat the thaw water for fish, boost cold water going into factory hot water cylinders and use any leftover heat to warm the factory. This will be coupled with other initiatives such as reducing engine room activity on weekends and reprogramming controllers in the engine room to shut down over night. We plan to report on the savings made next year.

Sanford's mussel-processing site in Havelock underwent an energy audit in January 2007. The site had already made a number of significant energy efficiency improvements prior to the audit. However, the report suggested that additional energy savings could be achieved by reducing energy consumption, peak loads and tariff costs. The initiatives identified included improved control of plant, adjusting refrigeration set points, and education of staff while other proposals involved more investment.

Many of the initiatives have since been implemented and, in terms of annual energy usage (electricity + factory fuel), the plant used an average of 1.79kWh/kg of product produced in the year to September 2009 compared with 2.17kWh/kg in 2006. This shows a marked improvement in energy efficiency.

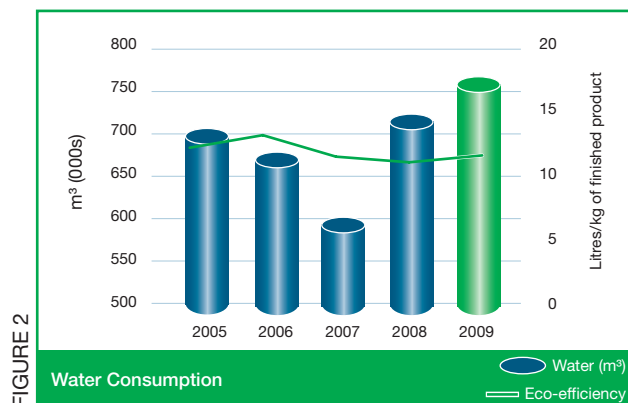
The key energy project for 2010 is to investigate a heat-recovery system to use waste heat from refrigeration to heat water. A survey has been carried out and it is estimated that an 11% energy saving can be made with a payback period of two to three years.



### Water Use

One of the big ideas to come out of the environmental summit in Auckland early in June 2009 was the broad agreement that the biggest environmental challenge in New Zealand after climate change is management of our fresh water resources. Water quality is declining and water is scarce in some regions. The summit, organised by the Environmental Defence Society, focused on critically examining how well New Zealand's current environmental governance structure is performing and how it might be strengthened in the future.

Overall our water use increased by 6%, as shown in Figure 2. The eco-efficiency also increased meaning the 2009 target of 10.79l/kg product remains for 2010. A considerable portion of the total water used was attributed to the incorporation of 50% of Weihai's use. Without this the actual water use would have declined by 5%. This is a good result given the rise in consumption of 20% in 2008. The majority of the plants contributed to this reduction with the exception of Bluff (which had a marked increase in production), the Timaru fishmeal plant (which is discussed more in the Coal Consumption section) and the Auckland Fish Market (which has the Big Picture Wine™ operation water usage included).



## Environmental Sustainability

### Solid Waste Produced

With the introduction of the Environmental Database this year, waste has been reported in cubic metres. This change was instigated as it is considered a more accurate measure of the environmental impact of solid waste. Because of this change the previous years' data was not comparable. Another improvement has been the creation of a solid waste eco-efficiency which gives a more accurate measure for annual comparability, as the amount of waste generated is directly impacted by variations in production techniques and changes in total production.

In addition, plants have begun reporting the amount of waste diverted to recycling schemes. The Waste Minimisation Act 2008 seeks to discourage waste going to landfills, and encourage recycling and producer responsibility. At Sanford we continue to investigate possible options for disposal of waste to avoid the use of landfills. This data will be reported on next year.

### Coal Consumption

The Timaru fishmeal plant is the only operation that uses coal. The eco-efficiency is calculated using the coal consumed and the fishmeal produced at Timaru fishmeal plant only. Despite considerable gains last year, a reduction in production coupled with an increase in resource use meant the 2009 eco-efficiency was significantly increased. One of Timaru's objectives for 2010 is to improve the performance of the fishmeal plant. The first step is to conduct an eco-audit to determine why EMS performance has been substandard in the 2008/09 year. In addition, the plant currently utilises a seawater system; if this is not functioning correctly, potable water must be used instead. This has potential impacts for both the environment and operating costs. The objective for 2010 is to reduce potable water use for the plant by refurbishing the seawater pump.

### Diesel Consumption

The Company has continued with initiatives to improve the efficiency of use of diesel resulting in a slight decrease in both total diesel use and the eco-efficiency. However, as the target was not achieved it remains in place for 2010. As our operation is very fuel intensive and the majority of our greenhouse gas emissions arise from this use, we must continue efforts in all areas even if savings are incremental. The data for 2008 has been altered slightly as the Pacific Tuna Fleet data was amended to more accurately allocate usage to trips and thus financial years.

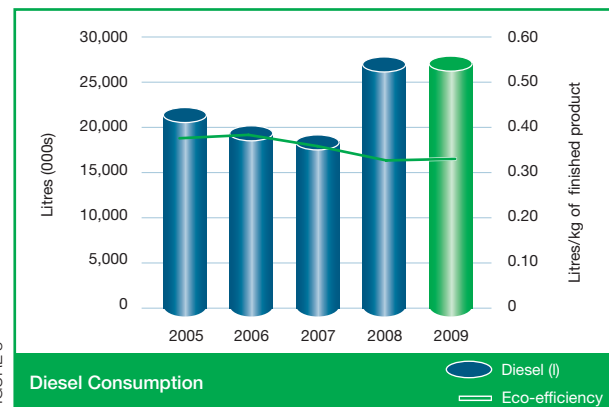


FIGURE 3

### Refrigerant Consumption

Use of refrigeration systems is intrinsic to our business in ensuring product quality is maintained. We report the type and amount of refrigerants added to our systems as this represents the volume of refrigerant gas released to the air through faulty seals or damaged equipment. Table 3 shows the amounts of particular refrigerants that have been added to refrigeration systems in factories and on vessels. Last year we reported on the marked increase in the amount of R22

Refrigerant type	Global warming potential	Ozone depleting potential	Amount of gas added (kg)			Amount of change
			2007	2008	2009	
69L	2,730	0.050	–	60	–	(60)
NH3	–	0.000	2,644	944	1,556	612
R134a	1,300	0.000	–	–	27	27
R22	1,700	0.050	1,425	3,299	1,205	(2,093)
R404A	3,260	0.000	40	–	1,306	1,306
R406A	–	0.030	10	27	11	(16)
R408A	1,944	0.016	217	203	125	(78)

TABLE 3

Refrigerant Profile

## Environmental Sustainability

used, which was attributed to the scampi vessels. However, as the two oldest scampi vessels were decommissioned, we had a significant reduction in the amount used as predicted.

The global warming potential (GWP) refers to how much a chemical impacts global warming over a specified period of time in comparison with the same amount of carbon dioxide. We use these factors and the data above to calculate the amount of greenhouse gas emissions created from the escaped refrigerants.

### Greenhouse Gas Emissions

We continue to report on our greenhouse gas (GHG) emissions. We estimate Sanford's total emissions of greenhouse gases from our New Zealand operations to be of the order of 82.6 thousand tonnes of CO<sub>2</sub>-equivalent a year. In order to maintain comparability we used 2008 emissions factors. Although the total emissions were slightly reduced compared to 2008, the eco-efficiency increased, as shown in Figure 4. As we did not achieve our target, the 2009 target remains for 2010. Figure 5 shows the percentage contribution from key sources of our GHG emissions. As can be seen, the majority of our emissions come from diesel usage.

Australia and China operations have been omitted from the GHG calculations. The profile for both would have a much larger contribution from electricity. This is because of the type of business activity (i.e. proportionally more electricity use) and the fact that the emissions factors for electricity in both countries would be greater, as they are more dependent on coal-fired generation than the New Zealand operation which can use electricity from renewable sources (i.e. hydro and geothermal). In future we will need to consider how we measure and report GHG as we want to both demonstrate to stakeholders the total emissions created by our activities and report those emissions that are required to be accounted for under national legislative schemes such as the New Zealand Emissions Trading Scheme (NZ ETS) and the Australian Carbon Pollution Reduction Scheme (CPRS).

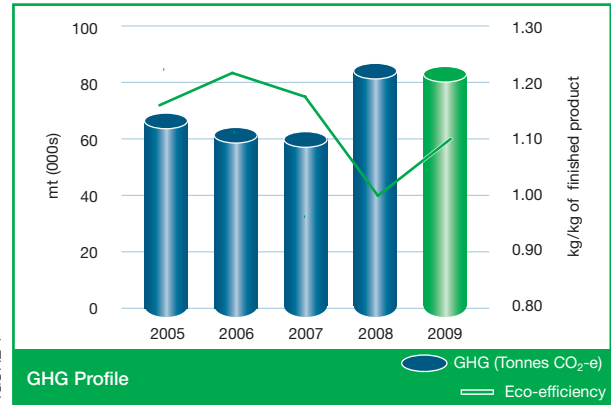


FIGURE 4

Note: Excludes emissions from the use of rental cars and emissions related to transporting finished product as they lie outside of the reporting boundary.

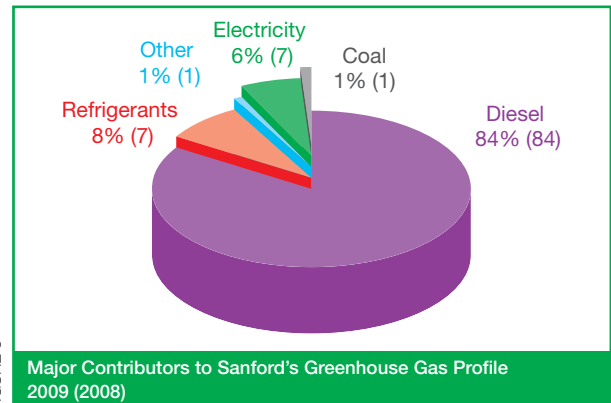


FIGURE 5

### Lube Oil Use

We did not meet our target for recycling lube oil and so the target for 2010 remains the same as the 2009 target. The actual amount of oil used was decreased and the percentage recycled more comparable to years prior to 2008. There was a marked increase in Bluff due to the larger engine size of the vessel, San Hauraki, which replaced the Explorer Douglas mid last year. In addition, the two generators on the salmon farm used to power the air distribution system require considerable amounts not used in prior years. However, the percentage recycled remained similar. There was a marked decrease of use in the Deepwater Fleet which is attributed to both the new reporting system and the variable nature of maintenance of these vessels.

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### Carbon Emission Footprinting and Reporting

Carbon emissions disclosure is increasing. This year, Sanford again participated in the Carbon Disclosure Project's Information Request. This initiative seeks information on behalf of 475 institutional investors, holding \$55.0 trillion in assets under management and some 60 purchasing organisations.

Both the UK and USA are proposing mandatory GHG reporting. In New Zealand, the Ministry for the Environment and the Ministry of Economic Development are applying pressure to businesses to think, plan and operate sustainably. Soon it won't be a choice, but a requirement, to embrace environmentally sustainable development. In order to do this, it is important to accept the impact that business has on the environment.

For most businesses today, sophisticated carbon management is not yet possible. At best, gathering, assessing and analysing the necessary information is a challenge. In some areas, such as measuring actual product-level footprints, it is almost impossible. However, a life-cycle assessment enables companies to identify "hotspots" and "opportunities for improvement" for emissions reductions.

This year, Sanford took part in the Seafood Industry's Gas Emissions Tool Development Project by providing data and critiquing the proposed mechanism. The project aimed to develop a product-related carbon footprinting tool in accordance with the PAS2050 guidelines, to enable seafood companies to estimate the GHG emissions associated with their product. SeaFIC undertook the development in partnership with the Ministries of Fisheries and Economic Development, the Energy Efficiency and Conservation Authority, Aquaculture New Zealand, and consultants ERM.

While global consumer interest in the sustainability of the seafood industry had tended to focus more on the sustainability of fisheries, heavy reliance on fossil fuels accounts for up to 50% of operational costs. Related projects already seek to address this by improving efficiency of vessel operation, gear deployment and fuel consumption. And with over 60% of New Zealand's catch processed at sea, refrigeration and refrigerant leakage are also major issues.

The project looked at a wide range of aquaculture production and wild catch capture methods. It did not attempt post-primary production life-cycle analysis. A key issue constraining the outputs of the project was the complexity of the sector, with significant variations arising from:

- different locations for aquaculture operations
- different species and stocks in the wild catch quota management system
- different harvesting methods, and whether a stock was a target fishery or a by-catch
- variations from company to company, vessel to vessel, and trip to trip.

The project delivered tools in the form of spreadsheets with which companies could carry out the calculations. It gave a good understanding of the big issues still to be addressed. Of the GHG emissions identified, three areas stood out: refrigeration (5–40%); fishing vessel fuel usage (20–90%); and materials transport (>5%).

Another important outcome was that the study identified that companies need to devote significant resource and effort to gather the data required for calculating a carbon footprint. It is important to identify the benefits of such a study, which are more likely to include the commercial benefit of identifying opportunities for savings on operational costs than the publicity benefit.

SeaFIC has confirmed that, while customers were not currently asking for seafood carbon foot-printing, this study was part of a defensive strategy to position the industry to respond to future interest in this topic.

Sanford aims to continue working towards more robust carbon measurement and analysis. The new Environmental Database has already helped improve data collection.

## Environmental Sustainability

### New Zealand Climate Change Response (Emissions Trading) Amendment Act

Most of the provisions of the New Zealand Climate Change Response (Emissions Trading) Amendment Act came into force on 26 September 2008. On 24 September 2009, the new Government introduced a bill to revise the New Zealand Emissions Trading Scheme (NZ ETS) to reduce the costs to households and the impact on jobs.

The NZ ETS is designed to limit carbon emissions, which New Zealand must do under international agreements, by putting a price on carbon. In reality, the simple facts are:

- New Zealand is still a signatory to Kyoto and subject to its obligations
- NZ ETS is still in force – but under Select Committee review
- New Zealand taxpayers are still liable for any shortfall under Kyoto
- major emitters and their lobby groups are unhappy with the targets and undue haste
- “green groups” are unhappy with the targets and lack of action.

As originally proposed, the NZ ETS would have placed the seafood industry at a significant competitive disadvantage compared with seafood suppliers in other countries. Sanford, among other interested parties, presented a supplementary submission to the Review Committee on 2 March 2009, which resulted in enhanced transitional support for the fishing industry (an increase from 50% to 90% of free allocations). Despite these revisions, and being assessed as an industry involved in Energy Intensive Trade Exposed (EITE) activities, the fishing industry still did not receive complete parity with other primary industries.

We also requested that the period of the carbon credit phase-out for the seafood industry (currently no phase-out period) is consistent with other primary industries (starting in 2012 with a 1.3% phase-out per year). The allocation of the carbon credits to quota owners is supported by Sanford. The final report from the select committee was received mid-November 2009. The ETS legislation has now been passed. There were no changes to the fishing sector benefits from those proposed in the Bill. However, these outcomes could be subject to change following the Copenhagen Climate Change Conference 2009. The important messages are:

- The ETS will apply to the liquid fuels sector from 1 July 2010. It is expected that diesel costs will rise by 3.5 cents per litre in the period to 31 December 2013. Diesel prices are expected to rise by a further 3.5 cents per litre from 1 January 2013, when the full ETS costs will be recovered through fuel costs.
- The amount of compensation offered to the fishing sector is 700,000 carbon units. These will be allocated to quota owners on the basis of the weight of quota held at 24 September 2009. A plan will be developed to detail the allocation to individual quota owners.

As Sanford is not a large emitter, the point of obligation applied to transport fuels in July 2010 will be the primary driver of increased costs. Businesses, including ours, need to focus their attention on energy efficiency, new technologies and robust carbon management strategies to price carbon into business decisions. Sanford is focusing on strategic carbon management for assessing risks and opportunities and mitigating the cost implications. We are progressing with the monitoring of our “carbon footprint” so we can more effectively measure and manage our emissions, and position ourselves for potential opportunities and risks. We are currently in conversations with a number of carbon market players to determine the best strategy for the Company.



## Environmental Sustainability

### Environmental Compliance

Sanford has been operating since the late 1800s and is representative of the history of New Zealand's fishing industry. We are committed to modernising technology and equipment to ensure continuous improvement of processes and systems in safety, production, service and environmental management.

Sanford has a number of compliance systems to ensure our systems and controls meet or exceed regulatory compliance and codes of practice. The Quality Management System, Environmental Management System and Health and Safety System all ensure that staff members manage operations in line with regulations and guidelines. We monitor our performance to ensure we minimise environmental harm.

#### Environmental Management System

We are committed to our Environmental Management System (EMS), which is certified to the international standard AS/NZS ISO 14001:2004. This year we successfully met the standards of the triennial recertification audit, held in February 2009. An internal system review was also undertaken this year and our procedures are currently being updated.

The EMS is an important tool for ensuring ongoing focus and active management of our environmental impacts. One of the main focuses of the EMS is continual improvement, which is achieved by setting annual objectives and targets. These include monitoring of significant aspects such as fuel, water and electricity usage.

Additionally, there are a number of environmental protocols and organisations to which we commit as part of our environmental strategy:

- New Zealand Packaging Accord – The leading instrument for packaging waste management and product stewardship in New Zealand
- Packaging Council of New Zealand – The industry association that addresses issues relating to packaging usage and waste in New Zealand
- New Zealand Business Council of Sustainable Development (NZBCSD) – The organisation that provides business leadership as a catalyst for change toward sustainable development, and to promote eco-efficiency, innovation and responsible entrepreneurship.

This year the New Zealand Institute of Chartered Accountants (NZICA) Annual Report Awards were held later in the year than they were previously. The awards are designed to encourage excellence in the presentation

of information in annual reporting. Prior categories of Best Sustainability Reporting by a Crown or Local Authority and Best Sustainability Reporting by a Corporate (of which Sanford was a joint winner in 2008) were combined into one category, Best Sustainability Reporting, for which Sanford was a finalist. The Awards were presented on 11 November 2009, where Watercare won both this category and best annual report by a public sector organisation.

A fishing quota pooling arrangement, which reduces fuel costs for the combined fleet of vessels harvesting deepwater fish species, was commended in the transport category at the 2009 EECA Awards. The Awards celebrate excellence and innovation in energy efficiency and renewable energy. The trawling industry is energy (fuel) intensive. Co-ordinating the harvesting plans of the fleet means that only one vessel at a time travels to each productive fishing ground, with catch rates improving as a consequence. This has resulted in a reduction in light fuel use of 1,116,000 litres a year, which equates to 3,281 tonnes of CO<sub>2</sub> emissions. The companies involved, of which Sanford is one, have jointly made energy savings worth \$1.1m. The judges were impressed with the volume of energy savings and that major industry players came together to show what can be achieved through co-operation.



San Waitaki, Sanford's vessel involved in the fishing quota pooling arrangement

#### Compliance Issues

The San Cuvier, which came ashore on 27 July 2008 on a rocky stretch of the New Zealand coastline, was removed this financial year. The grounding could have resulted in compliance issues; however, company representatives were able to access the vessel within a week of the grounding to remove pollutants, without further incident or environmental damage. In total, about 18,000 litres of liquids were successfully removed from the boat, of which about 11,000 litres was diesel fuel. All loose material was also

## Environmental Sustainability

removed from the boat. On 21 December 2008 a contractor engaged by Sanford completed dismantling and removing the remainder of the vessel. The Company would again like to thank the local residents, iwi, hapu, contractors and authorities whose assistance was much appreciated.

### Environmental Impacts of Fishing

#### Quota Management

New Zealand's Quota Management System (QMS), introduced in 1986, is the basis of sustainable management of fish stocks found within New Zealand's 200-nautical-mile EEZ. The QMS helps ensure sustainable utilisation of fisheries resources through the direct control of harvest levels for each species in a nominated geographical area. There are currently 97 species (or species groupings) subject to the QMS. These species are further divided into 628 separate stocks. Each stock is managed independently to help ensure the sustainable utilisation of that fishery. Scientific agencies and the industry work together to assess the population size of each species in the QMS and, each year, MFish uses this information to review the Total Allowable Catch (TAC) and Total Allowable Commercial Catch (TACC) allowance within the TAC.

Sanford acknowledges that the marine ecosystem is an extremely complex system. We support the need to gather further information that can assist in the setting of sustainable catch limits, particularly where scientific knowledge is limited, or there are signs of decline in fish stocks.

The Fisheries (Registers) Regulations 2001 require the Ministry of Fisheries Chief Executive to keep the following public registers: quota, annual catch entitlement, permits, fishing vessels, automatic location communicator, high seas permit, fish farmer and aquaculture agreement. These registers are operated by FishServe.

This year a number of stocks have had their TACCs changed, taking effect from 1 April 2009 and 1 October 2009. A list of the stocks that have changed is provided in Table 4 (note figures have been rounded).



San Cuvier being dismantled



San Cuvier vessel section on dry land



The coastline after the removal of the San Cuvier

## Environmental Sustainability

Fishing year	Species of interest to Sanford	Stock	TACC (tonnes)		Percentage change
			2008/09	2009/10	
April–March	Rock Lobster	CRA7	124	189	52%
April–March	Rock Lobster	CRA8	966	1,019	5%
April–March	Southern Blue Whiting	SBW6B	9,800	14,700	50%
October–September	Black Cardinal Fish	CDL2	2,223	1,620	(27%)
October–September	Dredge Oyster	OYS7C	43	63	47%
October–September	Elephant Fish	ELE3	950	1,000	5%
October–September	Elephant Fish	ELE5	120	140	17%
October–September	Flatfish	FLA3	1,430 (1,780)	1,430	Note <sup>1</sup>
October–September	Hoki	HOK1	90,000	110,000	22%
October–September	John Dory	JDO7	114	125	10%
October–September	Ling	LIN7	2,225	2,474	11%
October–September	Orange Roughy	ORH3B	9,420	7,950	(16%)
October–September	Oreo	OEO3A	3,100	3,350	8%
October–September	Red Gurnard	GUR3	800	900	13%
October–September	Red Gurnard	GUR7	681	715	5%
October–September	Redbait	RBT3	N/A	2,190	Note <sup>2</sup>
October–September	Redbait	RBT7	N/A	2,841	

TABLE 4

### Changes to Quota Stocks for the 2009/10 Fishing Year

1. In-season adjustment to provide for utilisation; returned back to the 2008/09 TACC of 1,430 tonnes at end of fishing year.

2. New species introduced into the Quota Management System.

Source: Ministry of Fisheries ([www.fish.govt.nz](http://www.fish.govt.nz))

A table detailing Sanford quota ownership and stock sustainability views is available online at [www.sanford.co.nz](http://www.sanford.co.nz)

#### • QMS Endorsement

In July 2009, New Zealand's fisheries status as a world leader in ecologically sustainable fisheries was endorsed in the international scientific research paper, "Rebuilding Global Fisheries", published in the respected journal *Science*. New Zealand was singled out, of the 31 marine areas evaluated, as an area where eco-systems have never been overfished and are effectively managed. According to the authors, New Zealand, along with Alaska, has led the world in terms of management success by not waiting until drastic measures are needed to conserve, restore and rebuild resources.

The research involved collaboration between scientists internationally but was led by Drs B Worm (a marine ecologist at Dalhousie University in Halifax, Nova Scotia) and R Hilborn (professor of aquatic and fishery sciences at the

University of Washington). It is a good example of ecologists and fisheries scientists coming together to work towards a shared purpose. Prior to this partnership, Hilborn and Worm had come to different conclusions over world fishery health, which means this study is being hailed as a landmark work by experts around the world.

While the results of the research are encouraging, there is still work to be done to ensure that the value New Zealanders receive through sustainable use of fisheries is maximised, while also protecting the aquatic environment. Initiatives like the long-term Fisheries 2030 programme will ensure this happens.

The research included an assessment of New Zealand hoki fisheries, which are a good example of rigorous management delivering sustainable stocks for the future. Hoki delivered NZ\$151.0m in export earnings in 2008 and is New Zealand's

## Environmental Sustainability

third-most-valuable seafood export after mussels and crayfish. On 30 September 2009, the New Zealand Minister of Fisheries announced that the Total Allowable Commercial Catch (TACC) of the nation's two hoki fisheries for the upcoming fishing year would be increased by 20,000 tonnes, more than a 20% increase over the previous year. This marks the successful rebuilding of the western stock, which required catch reductions: a painful process which was undertaken with full support by Sanford and other quota owners in order to keep the fisheries healthy and sustainable.

The decision came a few weeks after *The New York Times* ran a story questioning the sustainability of New Zealand's hoki fishery. After SeaFIC challenged the newspaper's reporting, a *New York Times* editor wrote a letter to the industry apologising for its conduct, while also issuing a clarification to its reporting. More information can be found at [www.seafoodindustry.co.nz](http://www.seafoodindustry.co.nz)

The pronouncement is also a powerful response to several environmental groups who have challenged the sustainable management of New Zealand's hoki fisheries even in the wake of a recertification by the Marine Stewardship Council (MSC) in 2007.

### Marine Stewardship Council (MSC) Certification

Sanford was again recertified for Chain of Custody (CoC) for the purchase, processing and sales of MSC-certified hoki and patagonian toothfish. This allows us to continue to market and label New Zealand hoki with the MSC logo, indicating to customers and consumers that the seafood is harvested from a sustainably managed fishery.

As reported last year, the outcome of the MSC assessment of the Ross Sea Antarctic toothfish longline fishery was expected in early 2009. However, we are still awaiting the final decision. The certification body announced that the Public Comment Draft Report was available for comment no later than 27 August 2009. This has been completed and the next steps are final report determination and then certificate issue.

Three other New Zealand EEZ fisheries currently in assessment that are of interest to Sanford are: hake trawl fishery, ling trawl and longline fishery, and southern blue whiting pelagic trawl fishery. More information on certified fisheries and those currently in assessment is available at [www.msc.org](http://www.msc.org)



The Antarctic toothfish (*Dissostichus mawsoni*), at rear, has a pattern on the fin compared to the Patagonian toothfish (*Dissostichus eleginoides*), foreground, which has a more uniform colour and has white tips on the fin



The teeth of the Antarctic toothfish (*Dissostichus mawsoni*), on left, are much smaller and generally more rounded and blunt than those of the Patagonian toothfish (*Dissostichus eleginoides*), right

### Interactions with Seabirds and Marine Mammals

Fishing vessels often come into direct contact with other marine inhabitants, sometimes with fatal consequences. Sanford employs numerous measures to avoid or minimise risk or harm, and continues to investigate innovative ways to reduce the number of interactions with marine birds and mammals attracted to our vessels.

From 1 October 2008, the new regulated Non-fish/Protected Species Catch Return (NFPSCR) came into effect. The NFPSCR form replaced the industry's voluntary Non-fish Incidental Catch Return which had been the main means of reporting incidental catch for most fishers. All vessels must now complete a form for each trip where there is an interaction, which gives an accurate indication of interaction in each fishery. Forms are due on the same day as the rest of the catch effort returns. This data is then entered into a governmental database.

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The non-fish and protected species catches that are reported include:

- Seabirds such as albatrosses, petrels, shearwaters, prions, gulls, terns, shags, gannets, boobies and penguins
- Marine mammals such as dolphins, toothed whales, baleen whales, seals and sea lions
- Marine reptiles such as turtles and sea snakes
- Corals, sponges and bryozoans (animals that form coral-like clumps on the sea floor)
- Protected fish species, currently great white shark (or white pointer) and spotted black grouper.

Sanford also records the NFPSCR data in our own Environmental Database, along with nil returns (trips where no interactions occurred), so we can report a more detailed picture of marine life interactions than we have done in previous years. We also aim to reconcile our data with MFish records in the future. We hope the increased detail in data can give beneficial evaluation in coming years, leading to targeted mitigation efforts and resulting reduced interactions.

One important feature of the new reporting system is the ability to compare those trips in which no non-fish/protected species were caught. Figure 6 indicates that almost half the trips resulted in no interactions with non-fish/protected species. Even with probable increased reporting, the results show reduced bird and mammal by-catch indicating that there is greater awareness and that there is proof that mitigation methods are working. We are pleased to report that Sanford vessels reported no deaths of Hector's or Maui's dolphins again this year.

This year we were able to report both birds and mammals that were caught alive and released, caught alive and injured (many of which recover and then are released alive), and caught dead as shown in Figures 7 and 8. The totals for prior years have been reported as total caught to provide comparison. This year was also the first time we have been able to report total catch of corals, sponges and bryozoans as shown in Figure 9. We have also provided a breakdown of the species caught in Figures 10 and 11. Please note that all groups of non-fish/protected species are graphed even if there were no interactions.

The regulations do not currently require inshore vessels to have bird mitigation devices if they are under 28 metres long. However, we voluntarily employ effective mitigation devices on all of the Inshore Fleet. In addition, Inshore

Auckland has a clause in private vessel agreements that requires them to employ bird mitigation devices, despite there being no regulation to do so.

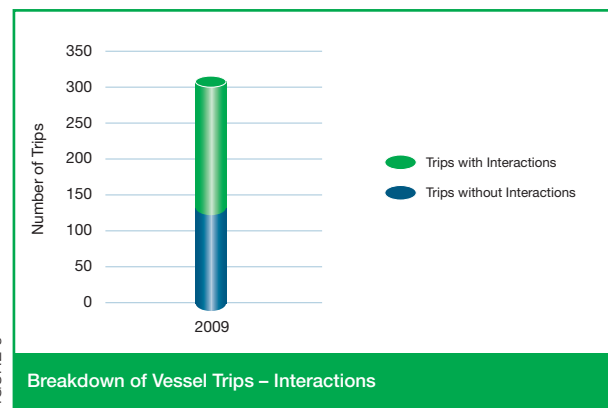


FIGURE 6

Source: Sanford Database (includes all fisheries)

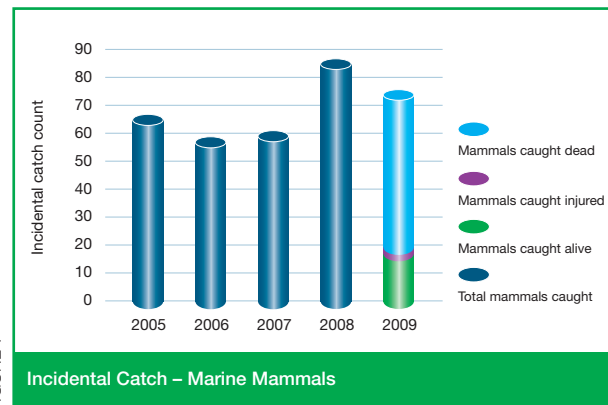


FIGURE 7

Note: New reporting regime in 2009

Source: Sanford Database (includes all fisheries)

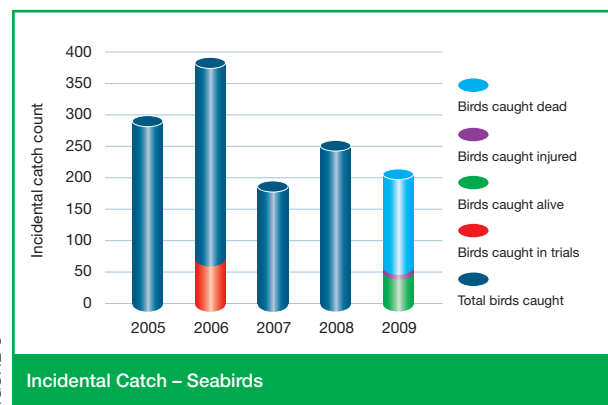


FIGURE 8

Note: New reporting regime in 2009

Source: Sanford Database (includes all fisheries)

# Environmental Sustainability

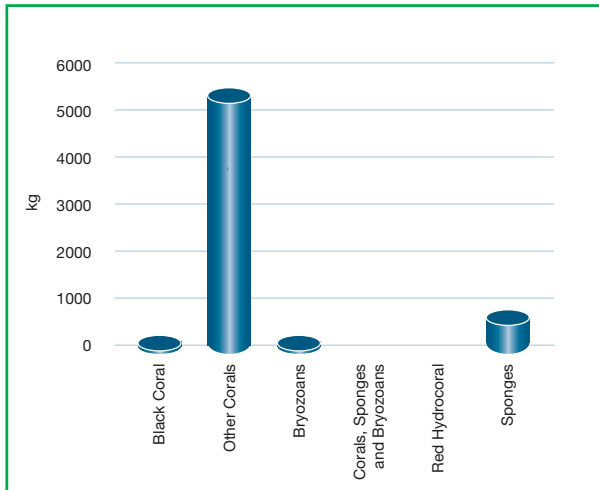


FIGURE 9

2009 Incidental Catch – Corals, Sponges and Bryozoans

Source: Sanford Database (includes all fisheries)

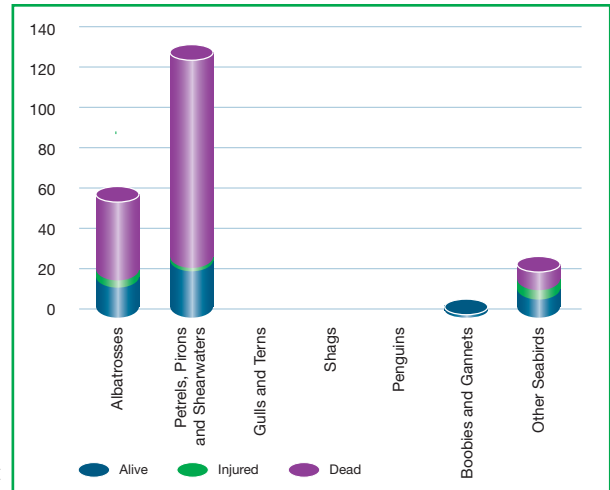


FIGURE 11

2009 Breakdown of Incidental Catch – Seabirds

Source: Sanford Database (includes all fisheries)

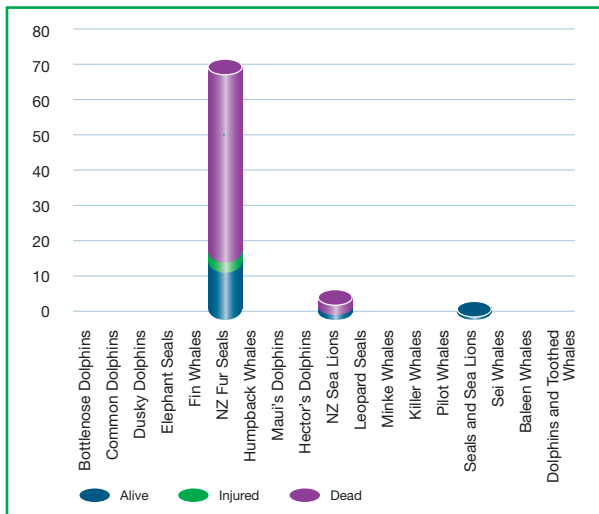


FIGURE 10

2009 Breakdown of Incidental Catch – Marine Mammals

Source: Sanford Database (includes all fisheries)

There are a number of both regulated and voluntary mitigation measures currently in place to reduce seabird interactions with our fishing operations across our fleet. Vessel management plans (VMPs) provide mechanisms for vessel-specific mitigation measures including auditing and monitoring regimes. These are managed by either industry commercial stakeholder groups or Sanford vessel managers and use a selection of either regulated or voluntary measures.

It is expected that seabird mitigation measures will continue to be developed and evolved to ensure best practices are employed on our vessels to minimise seabird interactions.

Sanford is committed to working on effective seabird mitigation solutions and we will continue to keep you updated on our progress.

The Southern Seabird Solutions Trust review process in 2008 highlighted a number of key themes on which the Trust should focus. These were further developed into business plans, one of which is a Development Pathway for New Mitigation Ideas. In the past, fishermen, inventors and gear manufacturers have come up with new mitigation ideas. Many ideas have not progressed beyond the conceptual stage because the person behind the idea did not know what the next step should be. This project involves developing and promoting a process that can be used for new mitigation ideas. It is sponsored by Sanford and, along with Eric Barratt's involvement as a Trustee, is a good example of stakeholder engagement. The trust provides us additional benefits of improved communication between interested parties, crew buy-in and resolving differences concerning observer involvement.

- **Controlled batch discharge trials: San Discovery**

In order to minimise seabird by-catch on trawl gear, it is best to discharge offal and discards when fishing gear is not in the water; however, this can be difficult. An alternative is the concept of batch discharging. Batching is a feature of factory trawler Vessel Management Plans and is based on the concept that holding waste for longer means birds aren't being fed as often and so shouldn't follow vessels as much; when a discharge does occur fewer birds should be around. Therefore, the bigger the waste-holding capacity, the more time will pass before discharge occurs again.

## Environmental Sustainability

Trials were completed last squid season to investigate this concept. Sanford's deepwater trawler San Discovery took part in trialling different offal/discards holding times (30 minutes, two hours, four hours and eight hours). After that time, all discharge was released through the normal chute and the observer recorded data on bird abundance within 40 metres from the vessel stern before, during and after discharge events.

The results generally support the view that holding for longer is better. However, within minutes of discharge occurring, bird numbers increased and then decreased when it ended. Bigger discharges took longer to complete meaning the amount of time there was discharge entering the water was approximately the same for each holding time. Bird numbers at discharge events decreased as holding interval increased; the same numbers of birds attended discharges at 30 minutes and two hours, there were fewer birds for four hours, but there was no additional reduction in bird numbers when discharges were eight hours apart. The number of large birds (mostly albatrosses) during discharge events was about the same, regardless of the holding time.

In summary, maximising holding time is ideal. There is no discernible advantage to holding for eight hours over four hours. However, the more holding capacity there is the more likely it is that discharging can wait until the gear is out of the water, and so the risk of seabird by-catch is minimised. For more information, please contact Johanna Pierre at [jpierre@doc.govt.nz](mailto:jpierre@doc.govt.nz)

### Marine Protected Areas (MPAs)

Sanford continues to support governmental national strategic policies formulated to provide protection for the marine environment. These are essential in ensuring sound management of both biodiversity protection and sustainable utilisation of the resource.

However, Sanford has suggested the Government reconsider the Marine Biodiversity Protection and the New Zealand Biodiversity Strategy 2000<sup>1</sup> as we are concerned about the incompleteness of this policy. We believe it gives rise to potential impacts on our quota rights as it neglects the inter-connectivity between other forms of closed areas (e.g. use of existing closed cable protection zones). Future MPA developments need to focus on combined national protection rather than on the current

<sup>1</sup> The New Zealand Biodiversity Strategy 2000 (NZBS) provides the strategic framework to conserve and sustainably use and manage New Zealand's coastal and marine biodiversity. One of the action points within the NZBS is, "to achieve a target of protecting 10% of New Zealand's marine environment by 2010 in view of establishing a network of representative protected marine areas".

regional fragmented approach, which is creating costly duplication of protected areas. This, in turn, results in potentially significant impacts on commercial fishing. When the Government is implementing MPAs, we have asked that it considers:

- National connectivity of MPAs
- Cumulative impacts on users and property rights owners from MPAs
- Risk-based assessments
- Fisheries management concerns.

One area of successful progress, which is fully supported by Sanford, is the Benthic Protected Areas (BPAs); 32% of the EEZ is now protected from bottom trawling. We consider that these existing BPAs and the Auckland Island Marine Reserve are providing adequate protection from any commercial fishing jeopardising biodiversity in the Subantarctic Islands.

Specific forums have been established to consider implementation of MPAs on a regional basis. Sanford representatives sit on both the Subantarctic and West Coast South Island forums, joining other representatives from government agencies, local government, tangata whenua and non-government organisations. Both of these forums have completed exhaustive meeting and consultation processes, resulting in a suite of proposed protection tools for implementation within each region. The proposals predominantly involve using Marine Reserves which clearly will impact on future fishing access.

Industry is proposing that the existing BPAs be used as a protection tool in the Subantarctic Islands, in combination with smaller, more discrete Marine Reserves. However, opposition is being presented by environmental sector members wanting full protection using extensive Marine Reserves within the 12-nautical-mile territorial sea of each island. The impacts on our existing fishing operation have been recognised by the forum and, fortunately, the impact of additional closures would be minimal for our business. The West Coast South Island forum also has limited impact on our current business. However, the precedents set in these forums when applied in other locations within the EEZ would be completely different, with greater potential impacts on Sanford.

Recommendations from the forums for MPA biodiversity protection following public consultation are yet to be sent to the Ministers of Fisheries and Conservation for consideration. The disparate views and the strong desire to review the MPA policy are creating ongoing challenges for the forums and any recommendations are yet some way off.

## Environmental Sustainability

### Key Points:

- Sanford supports national policies that protect the biodiversity of the marine environment
- Policies also need to accommodate resource utilisation so property rights are not adversely impacted
- Utilising a suite of protection tools, such as BPAs, successfully balances both aims
- Future MPA developments need to focus on national interconnectivity to avoid duplicate areas and costs
- Proposed Marine Reserves will restrict future fishing access.

For more information visit [www.biodiversity.govt.nz](http://www.biodiversity.govt.nz)

### Environmental Impacts of Aquaculture

Aquaculture is the farming of freshwater and saltwater species such as finfish, molluscs, crustaceans and aquatic plants. One half of the world's commercial production of fish and shellfish that is directly consumed by humans comes from aquaculture. In New Zealand aquaculture is the fastest growing sector of the seafood industry. The flagship species are New Zealand Greenshell™ Mussels, King Salmon and Pacific Oysters.

As aquaculture has grown, so have concerns about its environmental impact. However, research and commercial feed improvements have lessened many of these. Mussels and oysters are filter feeders, meaning they filter phytoplankton from the sea by pumping the water through their gills. A typical mussel filters 360 litres of water each day, which highlights the importance of growing mussels in pristine waters such as New Zealand has to offer. Filter-feeders also filter pollutants as well as nutrients, which can improve water quality.

Fish waste created by the salmon farm is organic and composed of nutrients necessary in all components of aquatic food webs. In-ocean aquaculture can produce much higher than normal concentrations of fish waste which collects on the ocean bottom, damaging bottom-dwelling life. This year Sanford installed a technologically advanced feed system that utilises underwater cameras to ensure good feed management, greatly reducing the potential impact on the sea floor. See the [Sustainable Farming case study](#) for more information.

In addition, all marine farm consents in New Zealand are currently established under the New Zealand Resource Management Act (RMA) 1991. These contain a framework for sustainable environmental management. As part of the consent monitoring Sanford report the nitrogen released based on feed use. National Institute of Water & Atmospheric

Research (NIWA) also completes a study of the seabed each year which is then sent to Environment Southland.

New Zealand companies do not use therapeutants, vaccines or antibiotics in farming king salmon.

### Mussel Shells

This year, Sanford Havelock supplied additional mussel shells to Dr Darrell Patterson, Dr Mark Jones and Associate Professor Brent Young of the Department of Chemical and Materials Engineering, University of Auckland. Together with students Sean Dillon and Rosamund Sargisson, they are using the shells in two different but related projects. For both, they first clean, crush, grind and sieve the shells and then pyrolyse (in a furnace) the different size fractions into lime. They then use this lime in two different ways:

- To develop a chemical reaction system that converts the lime into hydroxyapatite (HA). This is a high-value product that is currently used in biomedical applications: for growing cells, as bone glues, and as a coating that promotes bone and tissue growth on prosthetics. They are currently working with the Medical School to determine the viability of biomedical applications of the mussel-shell-derived HA.
- To use both the crushed mussel shell and the mussel-shell-derived lime in a novel active-passive filter; their aim is that this would be used in rural areas to treat phosphate-laden wastewaters. Testing this year has proven the concept and they are currently looking to refine the filter and explore its application and operating envelope further.

Sanford will continue to supply shells next year.

Previous trials using crushed mussel shells as mulch under grapevines have shown excellent results in aiding frost protection and controlling weeds, thus reducing the amount of herbicides used. Work is under way to measure the fuel currently consumed to dispose of the shells so the economics of the vineyard option can be assessed. Research on other alternative disposal options for the Greenshell™ mussel shells has been adjourned at Havelock in order to determine an alternative disposal option for blue mussel waste, a by-catch of the harvest. A number of possibilities exist which could utilise both the mussel meat and the shells.

### Salmon Farming

The expansion of the Stewart Island Big Glory Bay salmon farm to include new cage systems has been completed. Please refer to the [Sustainable Farming case study](#) for more information.



## Environmental Sustainability

### Sustainable Farming in Big Glory Bay

The upgraded and expanded salmon farm at Big Glory Bay on Stewart Island, opened by Minister of Fisheries Honorable Phil Heatley on Friday 7 August 2009, is good news for Southland's economy and employment opportunities, but even better is that it may be the beginning of a significant growth in sustainable fish farming.

**The history...** the first sea cage salmon farms were developed in Big Glory Bay in 1983 by British Petroleum. Sanford took over salmon farming operations in 1993 and is now the sole salmon farm operator in the area.

**The development...** a previous site was recommissioned and, along with the existing site, was upgraded. The project included the conversion of a mussel farm site to salmon. It involved: the introduction of eighteen 30x30m storm-strength cages across both farms; an underwater remote control camera system; a centrally operated, computerised, air-distribution feeding system; and a vacuum system to automatically remove dead fish from the tanks. Sanford Bluff Branch Manager Tommy Foggo said the technology from Norway and Chile was consistent with "the world's best farming practices". These systems combined will enable efficient feed use by giving both improved feed distribution and visual monitoring of feed consumption. This will result in an increased food-conversion ratio (FCR), reduction in feed usage and minimisation of potential environmental impacts on the sea floor due to feed wastage.

**The numbers...** the \$7.0m development took just over 12 months. The new cages can handle waves of two metres, will house in total about 930,000 fish and will see production increasing by 50% from 1,900 tonnes to over 3,000 tonnes of salmon annually. This will eventually mean extension of the processing season at Sanford factory in Bluff.



Minister of Fisheries Honorable Phil Heatley delivering the opening speech at Big Glory Bay salmon farm



Rotating, air-driven feed distributor that gives improved distribution around the whole cage

King salmon is the best species of salmon to give a marketing advantage, and our king salmon is a species that prefers the cooler waters that Big Glory Bay provides year round. The salmon is raised in the unpolluted waters of a New Zealand National Park which means it benefits from an absence of close proximity to urban areas and arable farmland, which can generate potential contaminant run-off. Major markets include Japan for frozen products, and chilled products for the New Zealand domestic market, Australia and the USA. Sanford adds value to salmon products in several ways by producing a variety of specifications to suit customer requirements.

## Environmental Sustainability



Surface and underwater camera views that provide visual monitoring of feed consumption



Surface camera (foreground) and overhead feed lines that supply each distributor

King salmon has the highest natural oil content of all salmon – a rich source of healthy Omega-3. A 150g portion of king salmon provides the complete daily requirement of Omega-3, which studies have shown to be linked to protection against heart disease and certain cancers and to the boosting of the immune system. The high mineral and vitamin levels in New Zealand king salmon also provide an array of nutritional benefits.

In addition to king salmon, Sanford also farms Greenshell™ mussels in Big Glory Bay. As with salmon, the mussels are well protected within the clean unpolluted waters of a New Zealand National Park resulting in Big Glory Bay mussels being certified as organic by AsureQuality New Zealand. The main markets are USA, Europe, Asia and Australia. Mussels are processed in various forms such as half shell and meat and also in various size ranges. Our products are free flow and require minimal cooking prior to consumption.



Mussel reseedling in Big Glory Bay

*"Since Sanford purchased the Big Glory operation in 1993, we have continued to invest and develop in this area, which is a key part of our New Zealand-wide aquaculture division."* – Eric Barratt, Sanford Managing Director

## Social Sustainability

In the recent period of economic distress and contraction, it has been important for companies not to overlook the value of being socially responsible. Priorities may change in the face of recession, but social programmes and sustainability should not be swept aside. In many companies, social investment is allowed for only when times are prosperous. But at Sanford, where management has integrated sustainability fully into business decisions, such initiatives have continued throughout the year.

Another major impact of the “credit crisis” is the loss of trust in large business, especially in the financial sector. The success of the Company relies on fostering strong stakeholder relationships with our employees and with local communities and businesses. Sanford has worked hard to ensure that there have been no job losses during the recession. We continue to maintain a healthy and safe working environment, local community partnership programmes and the supply of safe, healthy, quality products to our customers.

*“You can never have an impact on society if you have not changed yourself.”*

Nelson Mandela

### Sanford Snapshots

- Auckland crew members took part in a Water Safety course
- Sanford became a Kiwi Can national sponsor of new “Environment and the Community” lessons
- Auckland Seafood Festival donated \$60,000 to the Stellar Trust
- Personal accident insurance for all employees and share fishermen taken by the Company
- Sponsorship of a beach clean-up on Great Barrier Island



Auckland Inshore crew members take part in a Water Safety course

## Social Sustainability

### Employees

Sanford recognises employees are a valuable asset and that investing in the health, safety, well-being and education of staff members is not only the right thing to do but the most cost-effective thing to do. Improved staff morale not only increases staff retention rates and productivity but decreases the costs associated with staff turnover.

We are an equal opportunity employer and ensure adherence to relevant legislation. We believe in developing our staff and communicating with them on Company issues and about any concerns. We regularly engage with the unions to manage any issues such as suitable rates of pay and working conditions.

#### Staff Numbers and Diversity

It is even more important during times of economic hardship that staff feel valued by the company for which they work. Eric Barratt, Managing Director, reiterated the Company stance that during the recession no jobs would be lost. This was important in view of several major closures in similar businesses during the year.

The total number of employees increased this year, as shown in Table 5. This is due to the addition of Sanford Australia and International Pacific Tuna Fleet staff numbers resulting from the reporting scope adjustment. Staff for other divisions, excluding Havelock and Coromandel, decreased giving a total of 1,440, which is comparative with years prior to 2008 and attributed to:

- San Won employees being relocated to the joint venture table (Table 6)
- Deepwater tally staff inclusion under Deepwater Fleet
- Decommissioning of two vessels of the Deepwater Fleet
- Fluctuations in reporting crew members and seasonal staff
- Significant rain days in Kaeo during September; the plant has since achieved full seasonal capacity
- Bluff mussel factory night shift engaged last year has not been started this year.

Location	2005	2006	2007	2008	2009
<b>Inshore – fishing and processing</b>					
Auckland	166	126	154	153*	160*
Auckland Fish Market	25	38	23	27	37
Tauranga	198	191	169	182*	171*
Timaru	231	224	186	179	124*
Oamaru	4	5	6	1	1
	<b>624</b>	<b>584</b>	<b>538</b>	<b>542</b>	<b>493</b>
<b>Aquaculture</b>					
Kaeo	115	108	140	133	105
Coromandel	22	18	14	13	18
Havelock	218	220	251	259	277
Bluff	172	137	140	184	181*
	<b>527</b>	<b>483</b>	<b>545</b>	<b>589</b>	<b>581</b>
<b>Deepwater Fleet</b>	<b>266</b>	<b>312</b>	<b>319</b>	<b>320*</b>	<b>307*</b>
<b>Sanford Australia<sup>1</sup></b>					<b>44</b>
<b>International Pacific Tuna Fleet<sup>1</sup></b>					<b>68</b>
<b>Head Office</b>					
Head Office (Auckland)	45	45	45	43	43
Service Division	20	24	15	13	16
	<b>65</b>	<b>69</b>	<b>60</b>	<b>56</b>	<b>59</b>
<b>Total</b>	<b>1,482</b>	<b>1,448</b>	<b>1,462</b>	<b>1,507</b>	<b>1,552</b>
<b>*Includes Contract Fishermen</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Auckland	67	43	38	37	39
Tauranga	42	43	29	30	28
Timaru <sup>1</sup>					14
Deepwater Fleet	250	294	301	293	280
Bluff <sup>1</sup>					4
Sanford Australia <sup>1</sup>					4
International Pacific Tuna Fleet <sup>1</sup>					68
	<b>359</b>	<b>380</b>	<b>368</b>	<b>360</b>	<b>437</b>
<b>Sanford Employees as at 30 September 2009</b>					

TABLE 5

1. Not reported in prior years

## Social Sustainability

TABLE 6

Joint Venture Businesses	2009
San Won Limited, New Zealand	8
The Big Picture Auckland Limited, New Zealand	11
Weihai Dong Won Food Company Limited, China	392
Cicerello & Backhouse, Australia	1

Joint Venture Employees as at 30 September 2009

The business case for promoting diversity at work is not just legal and financial; it is also linked to looking after staff. New Zealand employers are prohibited by law from allowing for race or ethnicity in employment decisions. The composition of New Zealand's population is becoming more ethnically diverse, and the number of older people increasingly outweighs the number of young people. As a result, the future workforce will include more Māori and Pacific peoples and more people over 50 years of age; these groups have traditionally been overlooked by many employers. When compared to both industry and New Zealand workforce statistics, Sanford has always employed proportionally more Māori and Pacific Island peoples, as shown in Table 7.

The Sanford gender ratio varies from that of the New Zealand workforce; however, it is similar to the industry statistics. This reflects the largely physical nature of fishing and marine farming work. The gender balance is more equal within the factory and office environments.

The average age of both males and females at Sanford is 40 years. The average age ranges from 37 years in Kaeo to 45 years in Coromandel. Over 25% of employees are over the age of 50; however, contract fishermen are not included in these figures and would likely skew the figures towards an older average. Figure 12 shows the distribution of ages.

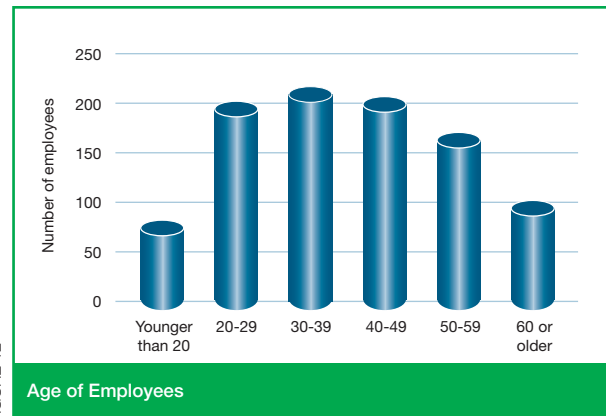


FIGURE 12

Sanford long-serving employees are a valued asset which provides a solid base of knowledge and skills that can be imparted to new employees. Those employed with the Company for more than five years make up 40% of staff numbers while those working for longer than 10 years make up 22% of the workforce, as shown in Figure 13.

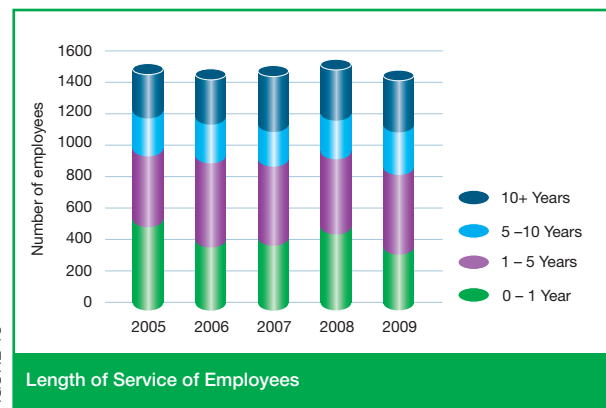


FIGURE 13

TABLE 7

	Sanford 2006	Sanford 2007	Sanford 2008	Sanford 2009	Industry <sup>1</sup>	New Zealand workforce <sup>2</sup>
<b>Ethnicity</b>						
European	56%	55%	57%	57%	86%	64%
Māori	27%	26%	25%	24%	11%	11%
Pacific Island	10%	11%	9%	10%	1%	5%
Other	7%	8%	9%	9%	2%	20%
<b>Gender</b>						
Female	31%	30%	32%	31%	34%	52%
Male	69%	70%	68%	69%	66%	48%

Workplace Diversity

1. Information sourced from Statistics New Zealand based on 2006 census. Industry data includes agriculture, forestry and fishing.

2. Information sourced from Statistics New Zealand, based on 2006 census.

## Social Sustainability

### Health, Safety and Well-being

Improving the safety of the workplace, investing in staff health and engaging employees is vital to ensuring our workforce remains unharmed and productive. Each plant has a health and safety committee which includes staff representatives. These forums meet at least once every three months to discuss performance against targets and objectives.

Sanford vessels operate Safe Ship Management systems, administered by Maritime New Zealand. Our inshore and aquaculture operations run a group health and safety system which is annually audited to the Accident Compensation Corporation Partnership Programme (ACCPP) standard. This year our Havelock site was chosen for the audit, which it passed comfortably, ensuring the group maintained its primary accredited status.

The Health and Safety system review scheduled for mid-2009 was undertaken and, in conjunction with ACCPP audit outcomes, was found to need some development. We are currently amending the Auckland system, with assistance from consultants, to develop a more standardised set of policies and procedures. The improvements in serious-harm injury monitoring planned for 2008 are encompassed in this review.

The ratio of work-related accidents to employees is shown in Figure 14. There was a slight decrease in the number of accidents per employee. However, there was a large increase in lost days. The major serious-harm accident that occurred at the Coromandel site in 2007, together with four other major injuries, contributed to this number. We are pleased to report that the person injured in 2007 has completed an intensive support and rehabilitation programme and been assessed as vocationally independent.



FIGURE 14

<sup>1</sup> Work-related accidents do not include those of contract fishermen

The two crew members, Rick Josephs (skipper) and Damian (Beef) Wyatt who sadly died during the grounding of the San Cuvier in July 2008, were remembered at the Blessing of the Fleet ceremony during the Auckland Seafood Festival in January this year.



Family members of Rick Josephs at the Blessing of the Fleet ceremony: Tyrone Flower, Lisa Flower and Andrea Flower

In April 2009, Sanford offered all staff the option of purchasing Tamiflu® capsules through a subsidised scheme. This was part of the Company preparedness for a possible outbreak of "Swine 'Flu". We also published information updating employees about the current situation as changes occurred and giving advice on international travel and personal hygiene during "flu season". So far the virus has proved relatively mild for most people who contracted the disease. Levels of influenza activity are increasing in the northern hemisphere and, with international travel, it is likely New Zealand will see further cases over coming months.



Auckland staff member receiving optional 'flu shot

## Social Sustainability

### Work/Life Balance

A company's performance is influenced by the well-being of its employees; Sanford recognises the need to facilitate the work/life balance. In addition to statutory rights, such as parental leave, we offer flexibility in working arrangements where appropriate.

In April 2009, the Sanford Board of Directors announced that the Company took out personal accident insurance cover for all employees and contract share fishermen (working on Sanford-owned vessels) both in New Zealand and Australia. The policy covers death or serious injury by accident on a 24-hour basis. This is another way in which the Company demonstrates a responsible approach to the loyalty and dedication shown by our employees and share fishermen.

A subsidised superannuation scheme is available to eligible employees. This rewards staff for their continuing contribution to the success and growth of the Company. Sanford also makes compulsory contributions to the government-legislated scheme (KiwiSaver) for those employees who have elected to join the plan. In 2009, these contributions increased from 1% to 2% as originally legislated. However, the new National-led Government has now capped Company contributions at 2% (previously 4%). The membership of eligible employees in both schemes is shown in Figure 15.

### Training

Training and development programmes are important in retaining and motivating a workforce to achieve ongoing business success. Sanford makes use of the Seafood Industry Training Organisation (SITO) industry-specific



FIGURE 15

New Zealand Qualifications Authority (NZQA) unit standards. In addition, we offer a variety of in-house and external courses covering a multitude of topics, from food safety, to health and safety, to communication. More consolidated training regarding the operating of the Inshore health and safety systems is planned with commissioning of nationwide training by WorkAon case managers.

This year, Auckland Inshore crew members completed a Water Safety course. The course is a standard part of obtaining a skipper's or mate's certificate. It includes use of flares, life vests, life rafts and water survival instruction. Sanford recognised the benefit of having all crew members attend such a course. Tauranga Inshore crew members will complete the course next year and the aim is for it to be a compulsory biennial crew requirement. This will minimise the potential harm should crew find themselves in such an emergency situation.



Auckland Inshore crew members on a Water Safety course

## Social Sustainability

The Deepwater Division updated the crew induction process this year and had it approved to conform to the SITO standards. This means on-board assessors can now complete SITO training at sea rather than through the fishing schools. Sanford Timaru is looking at adapting this for Inshore vessels.

Each plant and vessel maintains a minimum number of first aiders at any one time. This means we hold regular first aid courses throughout the country.



Sanford Auckland staff practise CPR skills during a First Aid course

Sanford employs a variety of nationalities at various plants. Havelock and Timaru have both employed a noteworthy number of Brazilian and Chilean staff. In 2009, Sanford Timaru part funded an on-site tutoring course in English for Speakers of Other Languages (ESOL). This was designed to support the formal courses participants were attending at the local polytechnic, but with language specific to the processing tasks they were performing at Sanford Timaru. All those who attended did so in their own time and participated fully. This was reflected in an improved awareness of factory requirements during work hours. Unfortunately most of the work permits of these staff members were not renewed this year which has meant the loss of a number of skilled, loyal and hardworking employees of several years; it will be difficult to replace them.

Growing Lines is a term chosen at Sanford Havelock that reflects the goal of improving training, communication and operational standards. It covers all aspects of the operation including procedures, communication and teamwork.

They are using "Standard Operating Procedures" as the foundation for improving work performance at Sanford Havelock. The long-term goal is to have everyone up to the level where they can participate in training working towards industry standards and qualifications. ESOL courses are complementary to this and will be addressed in the new year.

The Work and Income New Zealand (WINZ) seafood-specific training course reported last year was repeated in Tauranga again this year. Of the 10 attendees who completed the course five have been employed at the Tauranga operation. It has been launched again in September 2009 for the coming year.

### Social Activities

Local social clubs offer a variety of activities to their members. This year the Tauranga Social Club organised the following activities:

- February: Children's picnic at Memorial Park with games, BBQ and swimming for the kids
- March: Trip to Auckland's Pasifika Festival on Saturday and Round The Bays Walk on Sunday
- July: A mid-year social at the Hauraki Garrison clubrooms with a DJ
- September: Weekend snow trip to Taupo
- October: Netball/Rugby/Eightball trophy competition on Matakana Island
- October: Harbour fishing trip including prizes for best/worst fish.



Tauranga Social Club enjoys a day fishing on the harbour



## Social Sustainability

### Communities

#### Donations

Sanford aims to operate responsibly in all areas of our business and recognises that valuing the communities in which we operate enhances the cultural and recreational worth of New Zealand. It is important to continue to endorse local initiatives that promote community spirit, together with wider New Zealand schemes that support sustainability, especially in the current economic times.

There was a marked increase in Sanford's investment in communities this year. In addition to the usual support of the Kiwi Can programme in Kaeo, Auckland, Coromandel, Tauranga, Timaru and Bluff, a significant donation was made to fund the development of national lessons at participating schools. See the [Young Kiwis Learn case study](#) for more information. The Auckland Seafood Festival proceeds have been added to Table 8 to highlight the significant increase in charitable funds gained from the success of the improved event. See the [Auckland Seafood Festival case study](#) for more information.

A selection of other events we sponsored:

#### **Warkworth Lions Club 7th Annual "Take a Kid Fishing" event, Sunday 15 March 2009**



Improved advertising, sponsored by Sanford, led to double the number of participants compared to 2007, making it a very worthwhile event.

*"If it hadn't been for Sanford we would have great difficulty in raising the money to maintain the success of this event annually."* – Brian Simmons, Event Organiser, Warkworth Lions Club

#### **Sustainable Coastlines Aotea/Great Barrier Island coastal clean-up event, 3–4 April 2009**

Sanford contributed to ferry transport costs to the island on Saturday to enable volunteers from Auckland to continue the clean-up started by school children on the Friday. After only two days, 2.2 tonnes of rubbish was collected, enough to fill the baggage hold of the 250-seat ferry. The rubbish was ferried back to VISY Recycling, Auckland, who conducted a comprehensive audit of the items collected. The Waitemata Harbour Clean-up Trust estimates that 85–90% of the waste that ends up on Great Barrier Island's beaches comes from the streets of Auckland via the stormwater system and prevailing south-westerly winds. For more information visit [www.sustainablecoastlines.com](http://www.sustainablecoastlines.com)

*"The event went amazingly and a big thanks needs to go out to you and everyone at Sanford for being involved."* – Sam Judd, Event Director, Sustainable Coastlines



Sam Judd, Event Director, speaking at the Beach Clean-up educational session for school kids



Beach Clean-up rubbish pile on Tryphena wharf

Type of donation	2005	2006	2007	2008	2009
Auckland Seafood Festival Proceeds				\$15,463	\$60,000
Charitable Donations	\$16,710	\$15,238	\$4,890	\$33,674	\$33,300
Community Investment	\$124,805	\$167,029	\$220,070	\$174,761	\$225,665
<b>TOTAL</b>	<b>\$141,515</b>	<b>\$182,267</b>	<b>\$224,960</b>	<b>\$223,898</b>	<b>\$318,965</b>

Charitable Donations and Community Investments

TABLE 8

## Social Sustainability

### **Activate Leadership programme (a branch of Association Internationale des Etudiants en Sciences Economiques et Commerciales) Sustainability Seminar, 13 October 2009**

Sanford sponsored the advertising of a programme focused on encouraging participants to apply sustainable theories in a practical way to their lives and their future business practices. The seminar was primarily aimed at Year 13 high school students and university students: individuals who represent the future business leaders and entrepreneurs of New Zealand.



Students at Sustainability Seminar

We continued non-monetary donations in various regions: site tours, ice for school "snow days", waste fish products for penguin conservation programmes and collection of goods for Samoan tsunami victims. We also acknowledge,



Room 10 students at Katikati Primary School had some practical experience with sharks donated by Sanford Tauranga

and appreciate, the generosity of our employees who offer their time to volunteer their services and participate in charity events.

*"It was a wonderfully exciting day and for at least half the children it was a first-time experience."* – Ferndale kindergarten which received a donation of ice for their snow day

Lynne Fernandez, Seafood School Administrator, hosts tours of the Auckland Fish Market for groups including schools, PROBUS Clubs and business management groups. They feature the three main areas of the market: the auction area, the retail area and the Seafood School. Lynne gives a brief history of Sanford, its place as a publicly listed company and the background of the Company's sustainability focus.



Te Matauranga School, Clendon, class visit to the Auckland Fish Market

Members of our staff also represent the Company at a number of industry and wider business forums. This year we continued our membership of the NZBCSD and the Packaging Council and we hosted a meeting of the Environmental Professional Network at the Big Picture Wine™ experience facilities in September.

## Social Sustainability

### Auckland Seafood Festival just gets Better

The 2009 Auckland Seafood Festival was, as promised, bigger and better in every way. A perfect summer's weekend drew over 17,000 visitors to the new location at Halsey Street Wharf, Viaduct Basin. Many people found the event an ideal outing on the long weekend, making the event a "must-do" for future Auckland Anniversary weekend celebrations.

Profits from the event, staffed primarily by the Rotary Club of Auckland East, went to the club's chosen charity, the Stellar Trust, and its anti-drug campaign "RISE ABOVE P". The improved event format and record crowd numbers meant sizeable proceeds for the Trust to distribute to appropriate organisations to provide education, training and awareness. In total, Sanford donated \$60,000 to the Trust, compared to \$15,000 the previous year. Sanford is proud to be instrumental in funding such a socially responsible campaign.

The premise of the Festival is to celebrate the abundant array of seafood that Auckland has in the local Hauraki Gulf and surrounding New Zealand waters. Visitors were able to experience a wide range of New Zealand seafood and taste wines from top New Zealand vineyards. The family-focused entertainment was extensive featuring a great musical line-up, a competition stage (with activities such as Rotary Prize Wheel, oyster-eating competitions, Tug-O-War and fish filleting) the Greasy Pole contest and many other fun shows. The VIP lounge was available for those requiring additional comfort and an exclusive experience. The Blessing of the Fleet ceremony, held on the Saturday, is also an integral part of the festival. It is a tribute to those lost at sea and a wish for safety and prosperity in the coming fishing year.

In 2007, the Festival was declared "carbon-neutral", making it the first carbon-neutral festival in New Zealand and the Southern Hemisphere. This is demonstrative of Sanford's commitment to sustainable development in all aspects of its business. Perhaps equally importantly, events are places where large numbers of people congregate and can therefore provide an opportunity to reinforce public education messages. Sanford continues to ensure the Auckland Seafood Festival is a sustainable event by measuring and offsetting emissions associated with the event, and looking at ways to further reduce the impact the event has on the environment.

For more information visit, [www.aucklandseafoodfestival.co.nz](http://www.aucklandseafoodfestival.co.nz) and [www.thestellartrust.org.nz](http://www.thestellartrust.org.nz)

#### Key Points:

- Change of location and date in 2009 attracts best visitor numbers yet
- Success of event resulted in a record \$60,000 donated to charity
- Unavoidable carbon emissions created by the event are again offset



Surfcasting competition



Greasy Pole competition



Blessing of the Fleet Ceremony



Record crowds



Unusual fish display



Seafood School cooking demo

## Social Sustainability

### Young Kiwis Learn About the Environment and the Community

Sanford is proud to continue its support of over 15,000 young New Zealanders by sponsoring the Kiwi Can youth development programme, organised by the Foundation for Youth Development (FYD). Kiwi Can is a values and life-skills programme offered at approximately 70 schools around New Zealand.

In addition to the usual sponsorship, this year Sanford gave an additional \$35,000 to co-fund (with SeaFIC) the development of 10 additional Kiwi Can lessons. Based on the five key environmental concepts contained in the New Zealand Curriculum, the new lessons focus on teaching participants about the importance of environmental sustainability, biodiversity, personal and social responsibility, and interdependence.

The quality of our environment is dependent on New Zealanders taking responsibility to ensure that natural resources are available and accessible to future generations. Young people are important stakeholders who are capable of recognising that resources need to be shared equitably in order to maintain the environment. The lessons are aimed to give the students a greater understanding of the importance of managing natural resources and the importance of being responsible for their actions. The lessons also allow Kiwi Can students' learning to go beyond the classroom, by providing them with the opportunity of visiting a Sanford plant.

The new lessons were piloted at six Northland primary schools during Term 2. They were then rolled out to Kiwi Can leaders, in three regional training workshops, for incorporation into the existing Kiwi Can programme. Leaders took part in the student lessons, enjoying the energisers and activities. The workshops also included guest speakers, from both Sanford and SeaFIC, who gave an overview of the importance of sustainability and stewardship to the industry and set the lesson plans in the context of what the New Zealand fishing industry is doing in setting the international standard for quota management.

The FYD also undertook an evaluation exercise that involved school teaching staff. Teachers observed the lessons being delivered and then were asked for feedback on how effective and successful the module had been.

*"Sanford has been a valued, long-term sponsor of Kiwi Can in a number of regions, and the time was right to build on this by inviting them to become a national sponsor. By partnering with SeaFIC as well, we were able to create a set of new lessons which emphasise the importance of environmental sustainability, biodiversity, personal and social responsibility, and interdependence."* – Foundation for Youth Development co-founder, Graeme Dingle

*"A lot of [the students in] my room had no idea that New Zealand had fishing quota. The children will take a lot of what is taught straight home with them; this will benefit the whole community."* – Teacher feedback

*"Steve [Keeves] from Sanford inspired me to use new ideas and [told us] how to take care of our environment, e.g. fisheries."* – Participant at Tauranga training day

#### Key Points:

- Sponsorship by Sanford of Kiwi Can national initiative
- Involvement in development of lesson material
- Lessons build on Quota Management System by encouraging responsible recreational fishing



Andrew Bond on right (above), Sanford Liaison Manager, pictured with Kiwi Can leaders at a training day for Northland and Auckland teams



## Economic Sustainability

It is likely that the future will bring increased sustainability reporting. Eventually, transactions arising from the proposed Emissions Trading Scheme will make their way into company financial statements. There is a need for a significant shift within organisations to move towards successful implementation of sustainability practices. For Sanford, our economic success is founded in our fishing quota, aquaculture investment, operational efficiency and value-added product.

Seafood is big business in New Zealand as we control the world's fourth-largest fishing zone. As the country's fifth-largest export industry, the seafood industry employs more than 20,000 people in a wide variety of jobs from land-based scientific roles to hands-on positions at sea. Sanford is the largest quota owner in New Zealand. We employ over 1,500 staff (including fishermen) and operate seven processing plants in New Zealand. Over 88% of our product is sold overseas with the top four export areas being Europe (23%), Americas (22%), Asia (14%) and Australia (13%). Our top four export products are Greenshell™ mussels, skipjack tuna, hoki and orange roughy. More information is available online at [www.sanford.co.nz](http://www.sanford.co.nz)

During this difficult economic year, Sanford continued to be a strong company, with a relatively low level of debt and a broad operational base. Our business performed to expectation, taking into account the international financial changes and the uncertainty created among many of our customers. As a producer of one of the healthiest food proteins, we find ourselves in a business sector that provides food when people still need to eat.

*“The reconciliation of growth and the environment... is the vast and grand work of the 21st century.”*

Dan Walters

### About Sanford

- Revenue \$433.1m
- Operating cash flow \$31.1m
- Total assets \$720.9m
- Profit after tax \$39.1m
- Return on average total equity 7.3%
- New Zealand income tax paid \$17.5m

### Sanford Snapshots

- Aquaculture investment with mussel farms acquisition
- Invested in a tourism joint venture – Big Picture Wine™
- Purchased vessels San Hikurangi (previously named Gorm) and Venture K



Left to right: Shane Walsh, Sanford Inshore Manager, Phil Parker, Big Picture Wine™ Partner, New Zealand Prime Minister John Key and Eric Barratt, Sanford Managing Director, at the opening of Big Picture Wine™

## Economic Sustainability

### Financial Summary

	2009 <sup>#</sup>	2008 <sup>#</sup>	2007 <sup>#</sup>	2006	2005
	\$000	\$000	\$000	\$000	\$000
<b>Revenue</b>	<b>433,091</b>	<b>436,564</b>	<b>367,920</b>	<b>390,402</b>	<b>365,825</b>
<b>EBITDA*</b>	<b>68,366</b>	<b>65,874</b>	<b>52,197</b>	<b>63,303</b>	<b>38,295</b>
Depreciation, amortisation and impairment	(14,892)	(22,359)	(13,635)	(16,167)	(21,097)
Net interest	(6,788)	(10,021)	(11,109)	(12,247)	(11,418)
Net currency exchange gains (losses)	8,387	5,505	(10,511)	4,773	40,404
Net gain (loss) on sale of investments, property, plant and equipment	(35)	29,749	425	322	292
Gain on sale of subsidiaries	–	–	7,528	–	–
Profit before income tax	55,038	68,748	24,895	39,984	46,476
Income tax (expense)	(15,899)	(15,328)	(4,865)	(13,393)	(16,006)
Profit for the year	39,139	53,420	20,030	26,591	30,470
Minority interest	(64)	(76)	105	(517)	(102)
<b>Profit attributable to equity holders of the Group</b>	<b>39,075</b>	<b>53,344</b>	<b>20,135</b>	<b>26,074</b>	<b>30,368</b>

TABLE 9

#### Five-Year Financial Summary

\* Earnings before interest, taxation, depreciation and amortisation, impairment of investments, total currency exchange gains (losses) and profit on disposal of investments and fixed and long term assets.

# Prepared in accordance with New Zealand equivalents to International Financial Reporting Standards. To comply with NZ IFRS the 2005 to 2006 comparatives would require disclosure of biological assets in accordance with NZIAS 41 and intangible assets (mainly quota and marine farm licences) restated in accordance with NZIAS 38.

The financial results for the year ending 30 September 2009 have been prepared in accordance with New Zealand Generally Accepted Accounting Practice (NZ GAAP) applicable to financial statements. It is also compliant with New Zealand Equivalents to International Financial Reporting Standards (NZ IFRS), a set of accounting standards for the preparation of public company financial statements which ensure the business' statements are prepared on the same basis as that used by its foreign competitors, making comparisons easier.

Sanford is pleased to report a profit after tax of \$39.1m for the year ended 30 September 2009 compared with \$53.3m for last year. Please refer to the [2009 Annual Report](#) which contains detailed data for the 2008/09 financial period, along with information from earlier years. This report and previously published Annual and Sustainable Development Reports are available on our website at [www.sanford.co.nz](http://www.sanford.co.nz)

#### Shareholder Returns

Share prices are generally based on estimates of future earning potential. Therefore, the performance of a company's share price is a useful indicator on how the market views the Company's sustainability.

Figure 16 shows the performance of Sanford's share price against the index of the leading companies on the New Zealand Stock Exchange (NZX) and the Total Shareholder Return (TSR) of Sanford stock. The TSR

includes any dividends paid by the Company. Note the graph has been slightly amended as the TSR value given in the last two years' reports was incorrectly reported.

Sanford's share price has decreased relative to the NZX 100 index due to the effect of the higher United States Dollar (USD) exchange rate. Dividends of 23 cents per share were paid during the year; this provides an attractive return to Shareholders.

#### Economic Value Added

A method of monitoring a company's economic performance is by comparing the Economic Value Added (EVA<sup>®</sup>). This conveys how much value the company has created by comparing the return achieved on invested capital with the expected return to investors of comparable risk. Therefore a company has sustainable growth if it is making a higher return on capital than the cost of capital. Table 10 shows the estimated EVA of Sanford.

	2005	2006	2007	2008	2009
Return on capital	6.1%	5.2%	4.0%	10.2%	7.3%
Cost of capital	7.4%	8.8%	10.0%	8.5%	7.5%
Economic value added (NZ\$m)	(6.0)	(18.0)	(31.0)	9.0	(2.0)

TABLE 10

#### Economic Value Added

# Economic Sustainability

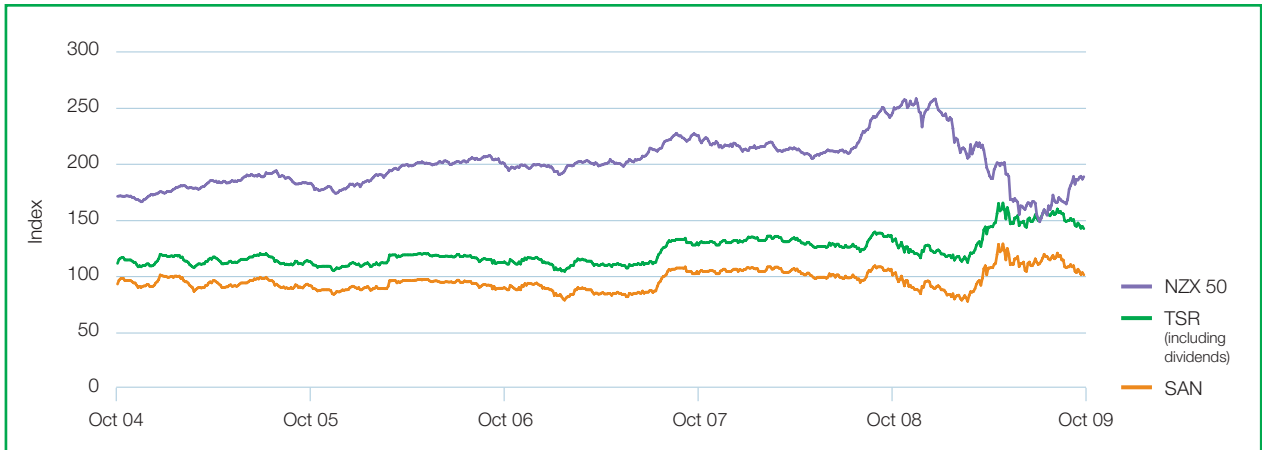


FIGURE 16

Sanford Share Price Performance Relative to NZX 50

## Economic Environment

Sanford operates in local, regional, national and international economic climates, contributing to all of these economies in a positive manner. The strong inverse correlation between the movement in the Sanford share price and the USD exchange rate is shown in Figure 17.

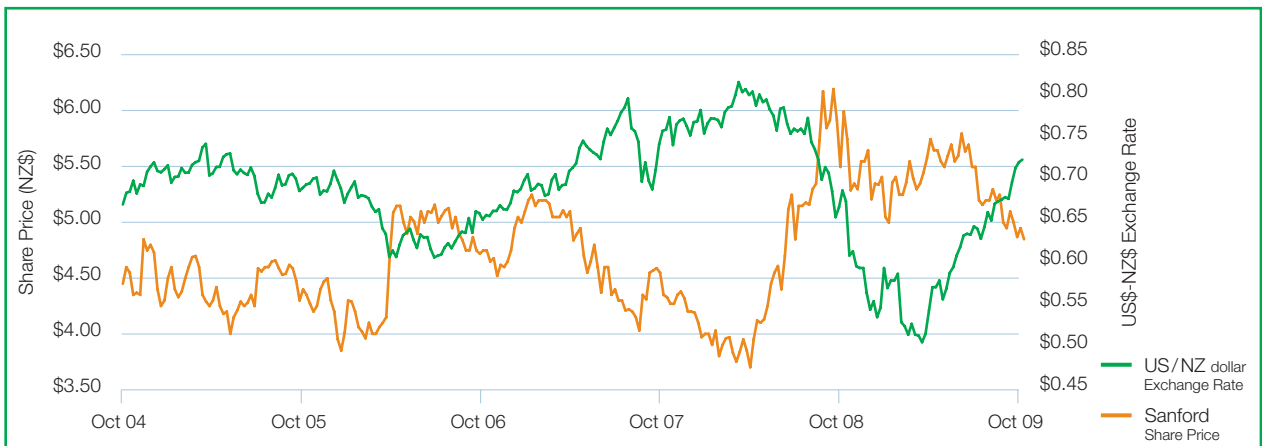
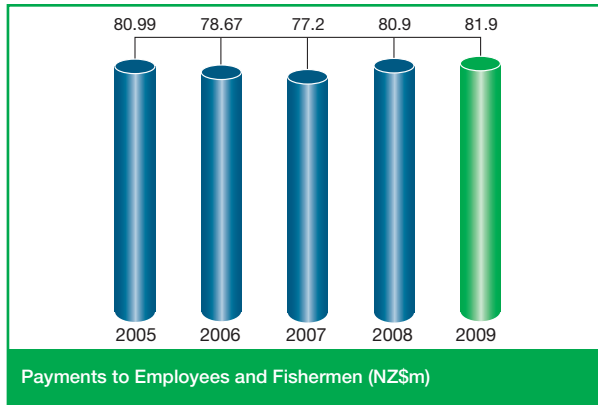


FIGURE 17

Sanford Share Price Performance Relative to US\$/NZ\$ Exchange Rate

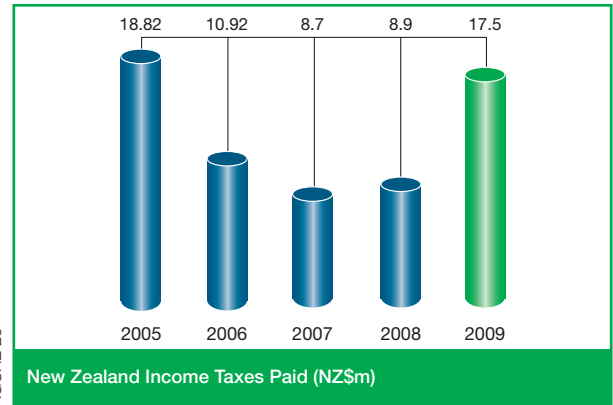
## Economic Sustainability

FIGURE 18



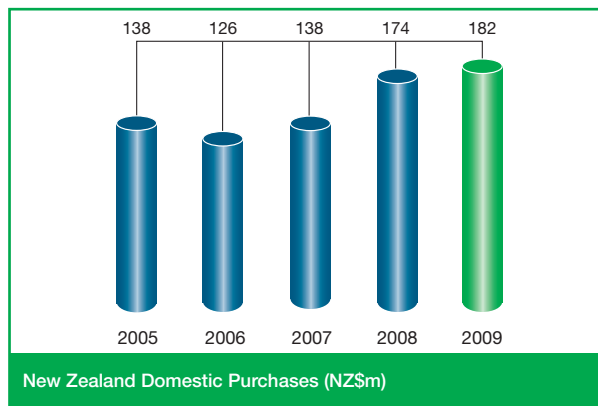
Often a major contribution to the local communities in which Sanford operates is the sum of payments made to employees and fishermen. This is also a source of significant tax income for the New Zealand Government.

FIGURE 20



The amount of the Company's profits paid in tax to the New Zealand Government, excluding tax on employees' wages and salaries, is shown in Figure 20. The large difference between 2008 and 2009 is due to a significant amount of non-taxable income in 2008.

FIGURE 19



Purchases from New Zealand suppliers are indicative of the Company's contribution to the domestic commercial economy.

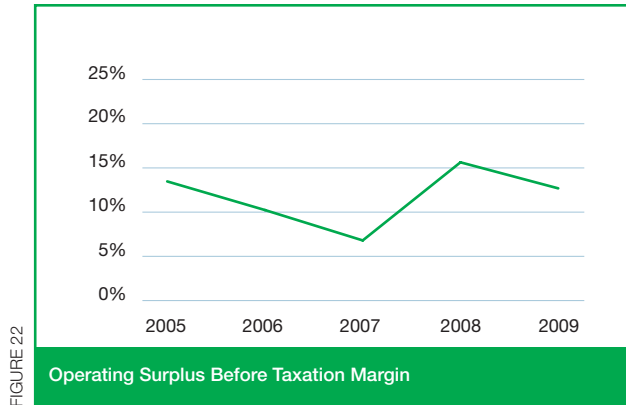
FIGURE 21



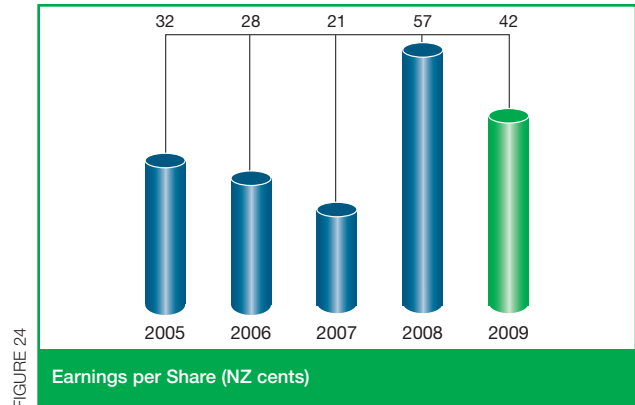
The balance of export earnings over imported supplies illustrates Sanford's net aggregate contribution to the New Zealand economy, showing the Company is a major contributor to New Zealand's trade balance.



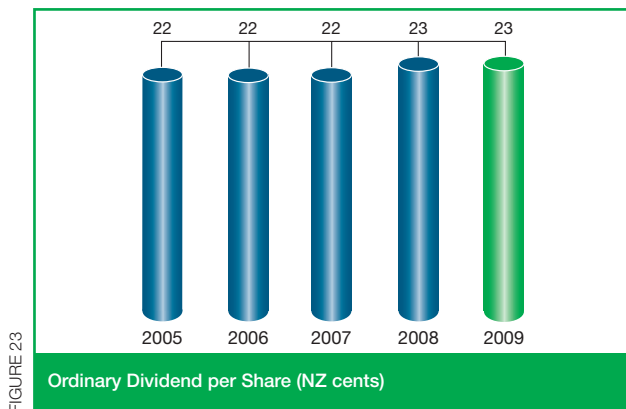
## Economic Sustainability



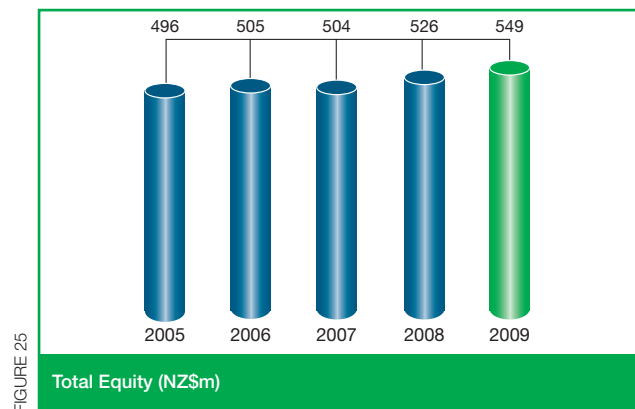
An indication of how a company is making a profit within the current sales revenue is shown by the operating surplus before taxation margin. The depicted fall in the 2009 value is due to a one-off inclusion in 2008 of the \$26.2m profit on the sale of shares in Fishery Products International Ltd (FPI).



The 2008 value includes a one-off gain of 28 cents per share due to the sale of FPI shares. If this were not included, the 2009 value would be greater than that of 2008.



Sustained profitability has allowed a steady dividend pay-out over the last five years.



The consistently high dividend payments to Shareholders, shown in Figure 23, and the earnings per share, shown in Figure 24, demonstrate the health of the Company and its overall financial performance. The ability of a company to maintain sustainable growth and the strength of its balance sheet are illustrated by the total equity (Figure 25). The 2009 data shows that Sanford continues to have strength in all three indicators, forecasting economic sustainability.

## Economic Sustainability

Entity	Percentage ACE (by tonnes)		
	2008	2009	Difference
Sanford Limited	25.10%	25.52%	0.42%
Pupuri Taonga Limited (Sealord Group Limited)	18.34%	20.73%	2.39%
Talley's Group Management Limited	12.36%	12.52%	0.16%
Independent Fisheries Holdings Limited	6.20%	6.28%	0.08%
KPF Investments Limited (United Fisheries Limited)	4.69%	4.58%	(0.11%)
Vela Quota Number One Limited	3.86%	3.94%	0.08%
Te Ohu Kai Moana Trustee Limited	5.71%	3.80%	(1.91%)
Ngai Tahu Fisheries Settlement Limited	1.77%	2.91%	1.14%
Aurora Developments Limited (Solander Pacific Limited)	2.02%	1.95%	(0.07%)
Aotearoa Fisheries Limited	1.62%	1.60%	(0.02%)
All Others	18.33%	16.17%	(2.16%)
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>	

**TABLE 11**  
Top Ten ACE Owners as at 9 October 2009 (2008: 20 October 2008)

Source: New Zealand Seafood Industry Council

Sanford is the largest Annual Catch Entitlement (ACE) owner (ACE generated from quota shares). ACE is a measure of the amount of fish that can be harvested from each stock. It is not a perpetual property right, as are quota shares. Annually, changes in ACE occur due to quota share acquisitions and TACC changes. ACE can also be traded within the season.

### Renewal and Growth

By upgrading facilities and technology to ensure operational efficiencies, Sanford's business model, based on forethought and a long-term vision, enables a competitive advantage. This puts the Company in a position to capitalise on growth opportunities wherever they arise.

Sanford announced on 27 July 2009, that it had reached agreement on the purchase of a package of marine farms in the Marlborough Sounds from Sealord. The \$23.4m package, including 236 hectares of waterspace and equipment for growing mussels and spat, is the largest-ever purchase of waterspace for marine farming in this country. This will give Sanford access to increased growing space for Greenshell™ mussels (of approximately 5,000 tonnes per annum) and allow for the continued expansion of our already extensive aquaculture interests in the Marlborough Sounds, Stewart Island, Coromandel and Northland.

Since Sanford announced the development and patenting of an automated mussel-opening machine, we have operated a fully automated machine line in Havelock on two shifts for a

proportion of our production. With the future benefits of this automated mussel opening, the purchase of the Sealord marine farms and other additional volume, we expect to be able to almost double the current throughput within three years.

The jointly developed mussel-processing company in Tauranga, North Island Mussel Processors Limited (NIMPL), is currently undergoing a \$23.0m upgrade which includes the automated mussel-opening machines.

Sanford acquired a second-hand trawler this year, for approximately NZ\$3.0m. There had been no investment in new or recently built inshore vessels for some time and this purchase shows renewed confidence in the future of the inshore fishery. The vessel was renamed to commemorate Sanford's long association with the Northland township of Hikurangi, where Sanford had a seafood processing plant for many years. The vessel was built in Iceland in 2003 and has an overall length of 22.0 metres, a 6.5 metre beam, is powered by a Caterpillar 3412E Main engine, with two 90Kw generators, and has accommodation for nine people.

The newer engine means the vessel has a much better fuel efficiency than do older vessels; compared to similar vessels it consumes almost half as much fuel. An additional benefit is the ability to produce higher quality products using the onboard flow-ice-making equipment and better storage and unloading systems.

## Economic Sustainability

The first Bluff oyster season, after the purchase of the Southland-based Jones Group fishing assets, was good. It has enabled Sanford to obtain a stake in the Bluff oyster fishery.

The EMS database, initiated last year, was used to generate data for this year's sustainable development report. It is still in the process of being commissioned with divisional reports being written; however, once it is complete we expect increased accuracy and transparency in our environmental data collation.



San Hikurangi being tugged to her new home

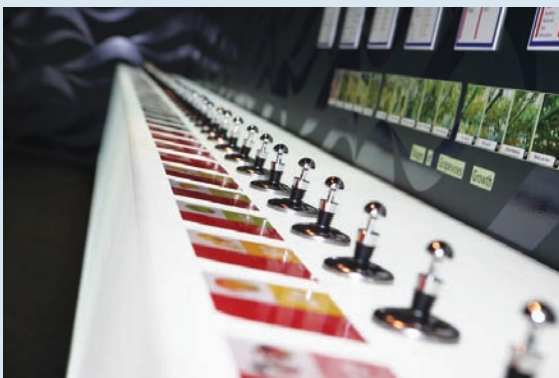
### Big Picture Wine™ – New Attraction at the Auckland Fish Market

This year, Sanford expanded into tourism, investing in a new joint venture with wine tourism operator Big Picture Wines™. Locals and visitors alike can now enjoy an entertaining, interactive wine and seafood sampling experience at the Auckland Fish Market.

The two businesses came together when Sanford was looking for another use for its auction room, which was being used only in the early hours of the working week. It is a good example of dual utilisation of a building that would otherwise operate for only a fraction of the day. "We wanted to maximise the use of the space," Sanford Managing Director Eric Barratt said.

Sanford owns 50% of the venture and, while economically it will not contribute significantly to Sanford's income, it helps to rationalise the costs of the Fish Market. "It adds to and complements the activities of the Fish Market," Mr Barratt said.

The experience begins with a tour of the aroma room, where visitors can take pleasure in sampling and identifying the hundreds of individual scents that comprise the wine bouquet. Next, guests enjoy a 30-minute film which takes them on a virtual "tour" of six local wineries and the unique local environments. Visitors sample the different wines while listening to the winemaker talk about the aroma and palate, and complementary food types, and give insights into the character of the wine. After this they can relax in the wine bar and sample the freshest seafood in Auckland from the delicious tapas menu.



Aroma room



An audience viewing the cinematic vineyard experience

## Economic Sustainability

### Sanford Supply Chain

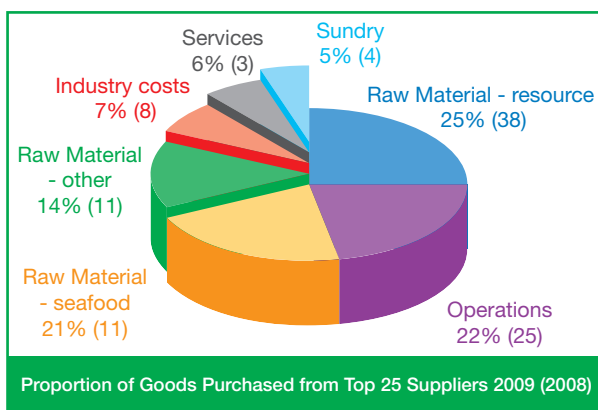
It is unlikely that any business is not both a supplier and a customer. To be effective, sustainable development must extend from an individual company, both up and down the supply chain, from raw materials to consumer use. Charting these relationships can be an extremely complex exercise. Increasingly, companies are addressing this issue driven by media and non-governmental organisation (NGO) campaigns, customer and consumer demand, and regulatory frameworks.

This year we partook in an industry carbon footprinting exercise designed to examine emissions from raw materials providers through the operation to the finished product, excluding transport to customer and consumer use. Please refer to the [Carbon Emission Footprinting case study](#) for more information.

A supplier questionnaire has been drafted, but not yet implemented. Together they form the starting point for a supply chain system; however, more risk and opportunity analysis is required. The initiative set in place by the New Zealand Business Council for Sustainable Development (NZBCSD) is being used as the template for implementing a sustainable procurement system.

#### Suppliers

The analysis of suppliers (i.e. raw material and service providers) shows that in the last financial year the top 25 suppliers (ranked by New Zealand dollar (NZ\$) spend) accounted for over 50% of the annual spend (excluding internal customers). Of these, 22 are New Zealand owned and operated, or have New Zealand-based operations. Resources such as fuel, lubricants and energy again account for the largest proportion of money spent with suppliers; however, this is down compared to that of 2008. The next-largest spend is on operations, which includes freight,

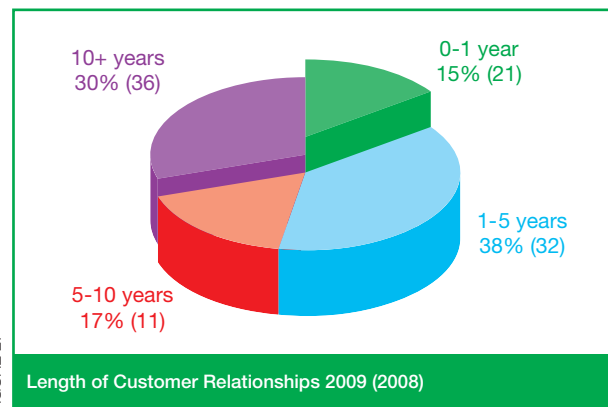


storage and contracted processing. Cost-recovery levies paid to the Ministry of Fisheries account for 7%. While this is not the only contribution to governmental and industry bodies, it does indicate the significant contribution Sanford makes to management and research into sustainable fishing in New Zealand. There was a large increase in the percentage spend on seafood, which includes ACE purchases.

An example of a relationship with a like-minded sustainable company is Sanford Head Office purchasing from Office Max. In 2009 we sourced 14% of products (by total spend) with environmental credentials. Although this was a 2% decrease on last year, the actual dollar spend increased by 10%. In addition, we are trialling an environmentally friendly courier bag satchel from NZ Couriers. These satchels are marginally more expensive than are the plastic bags, currently come in only one size, and therefore may not be practical for our use.

#### Customers

Sanford aims to enhance the value of our products by managing catch and harvesting operations to balance market supply and demand. This not only increases our



returns but gives stability within markets and between products, and ensures a consistent supply to customers. The current economic downturn did not significantly affect the demand for our products showing that foodstuffs such as seafood are resistant to a recession.

Maintaining the satisfaction and loyalty of our customers is important for ensuring sustainable economic growth. Fostering solid relationships with existing customers, while building new relationships, has facilitated our continued success. The breakdown of the length of relationships with our top 200 customers (Figure 27) shows a similar distribution to that given last year.

## Economic Sustainability

### Consumers

Sanford continues to produce a commodity that is not only of the highest quality, but is healthy and safe to eat for our consumers. Seafood remains a foodstuff that is in high demand despite current economic climes.

The Sanford Quality Management System ensures we consistently produce and supply safe, quality products. Our New Zealand plants are approved by the New Zealand Food Safety Authority (NZFSA) and operate Risk Management Programmes (RMPs) and Hazard Analysis Critical Control Points (HACCP) systems. We adhere to laws, standards and voluntary codes relating to marketing communications such as the international trading standards and Overseas Market Access Requirements (OMARs). We also operate a high level of traceability standards. Production and quality control often is found to be second to none; factories have internal QC departments and are supported by an R&D department, which ensures we stay ahead of developments in quality and food safety standards.

Regularly, publications make the link between health and consumption of seafood. In an increasingly affluent world this is reflected in a growing consumer demand. The SeaFIC publication, Seafood for Health, asserts that the consumption of two or more serves of seafood per week is associated with a lower prevalence of heart disease and that seafood is also a good source of protein and trace elements. There has recently been worldwide publicity on the health hazards associated with eating fish contaminated with mercury. Average New Zealand intakes are lower than 24% of the recommended maximum total mercury intake of 5.5ug/kg per week. The New Zealand Food Safety Authority says that for most commonly eaten fish and seafood species in New Zealand there is little concern about mercury. For more information, visit [www.greatestmeal.co.nz](http://www.greatestmeal.co.nz)

The New Zealand hoki we market is Marine Stewardship Council (MSC) certified. The MSC provides a fishery certification programme and a seafood ecolabel that recognises and rewards sustainable fishing. We welcome the opportunity to promote the best environmental choice in seafood.

### Stakeholders

Engaging with stakeholders is an important way in which to gain an understanding of pertinent interests and to strengthen relationships. Key stakeholders are identified as those on whom our business has an impact, and those who have an influence on us. An outline of how we engage with stakeholder groups and respond to some of their key issues can be found on our website at [www.sanford.co.nz](http://www.sanford.co.nz)

We received constructive comments from last year's Annual Report feedback forms regarding the need for more information on the mitigation of the effects of our activities on seabirds and marine mammals. This was covered in detail in the 2008 Sustainable Development Report but specific reference will be included in the [2009 Annual Report](#) sustainability summary.

As we value this feedback, we invite stakeholders to express their comments or suggestions in response to this year's report by completing the feedback form.

## Assurance Statement



Tonkin & Taylor Ltd was engaged to provide stakeholders with a reasonable level of independent assurance of the 2009 Sustainable Development Report (the Report) written by Sanford Limited. Our assurance covers the full Report except for the financial results reported.

### Our method

Our assurance assesses the Report content against the relevant Global Reporting Initiative (GRI G3) principles of materiality, stakeholder inclusiveness, sustainability context and completeness. The quality of information in the Report is assessed against the GRI principles of balance, comparability, accuracy, timeliness, clarity and reliability.

Our approach is based on international auditing and assessment standards including ISO 19011, AS/NZS 5911(Int):2005 and ISAE (NZ)3000. We explored the decision making process on content with senior managers of Sanford and reviewed stakeholder feedback on the 2008 Report. We prepared an interim report on the content. We reviewed a full draft of the Report. We interviewed key Sanford staff at Head Office and by phone to branches within New Zealand; these explored the background to Report items, their relevance and the sources of information. We sought documentary evidence to support a significant sample of Report items; we reviewed the data collection systems and confirmed most of the calculations. We made recommendations on draft versions of the Report. We reviewed, but did not verify or validate, information in the Annual Report regarding the company operations and governance. We compared the Report content to the GRI Indicators. We have prepared a detailed assessment report for Sanford which expands on this assurance statement.

### Our observations

Sanford has demonstrated that the new EMS database has improved data accuracy and reliability; however this may result in some apparent deterioration in performance. Comparability of data has been maintained as far as possible – changes in company structure have led to some loss of comparability, these have been explained.

The Report scope is presented as a simple table and the environmental profile table is clarified. Explanations of the environmental impacts of aquaculture, the introduction to

Economic Sustainability, examples of active stakeholder engagement such as marine protection and the Southern Seabird Solutions Trust usefully place Sanford's performance in a wider sustainability context. Sanford's decision to publish the Report online but in a format that allows printing, balances the environmental impact of the Report itself against stakeholder inclusiveness by providing a choice of formats.

### For the future

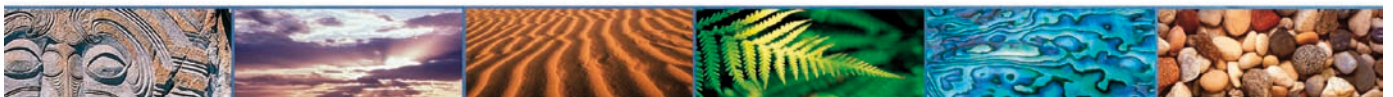
Sanford's trend of expanding information on the wider context of their operations should be continued, particularly their impact on the communities and local economies in which they operate. Presentation of performance data by division and/or branches could improve external stakeholder understanding of the nature and impacts of the different operations and increase the usefulness of the Report internally. The consequences of this on comparability with previous data should be considered. Presenting more historical data would give greater visibility of any trends or natural variation. We look forward to the development of a sustainable procurement system, to continued work on carbon measurement and on-going reporting of the more detailed seabird and marine mammal interaction data.

### Our conclusions

On the basis of our work, we conclude that Sanford's 2009 Sustainable Development Report is balanced, relevant to stakeholders and covers key material issues accurately and reliably. The Report meets the GRI requirements for a C+ level of reporting.

T&T has completed a number of engineering and environmental consulting engagements for Sanford; these do not present a barrier to T&T conducting an independent and impartial assurance of this Report.

**Marje Russ**  
Tonkin & Taylor Ltd  
7 December 2009



## Glossary of Terms

### Annual Catch Entitlement (ACE)

A catching right for fish – from the first day of each fishing year ITQ generates an annual catch entitlement (ACE) for which catch is measured against. ACE is traded separately to ITQ, and expires at the end of the fishing year.

### Aquaculture Management Areas (AMAs)

AMAs are areas zoned specifically to allow for marine farms. No new aquaculture is allowed unless it is inside an AMA. A resource consent is required for every marine farm in an AMA.

### Benthic Protection Areas (BPAs)

BPAs are areas within the New Zealand EEZ that are closed to bottom trawl fishing methods, including dredging, in perpetuity.

### Coalition of Legal Toothfish Operators (COLTO)

COLTO represents international legal toothfish operators who have a direct commercial interest in the well-being of the Antarctic and Patagonian toothfish resources and the ecosystems that support them. It supports legal and sustainable toothfish fishing.

### Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR)

CCAMLR has 25 member countries that have established a commission that manages the marine living resources in waters surrounding Antarctica.

### Deemed Values

Failure to accumulate sufficient ACE to cover catch by the end of the fishing year results in a deemed value liability – a monetary penalty. The deemed value rate for many fishstocks is ratcheted, i.e. the rate increases in line with the per cent of over-fishing for each fisher.

### Department of Conservation (DOC)

DOC is the central government organisation charged with conserving the natural and historical heritage of New Zealand.

### Emissions Trading Scheme (ETS)

Refer to New Zealand Emissions Trading Scheme.

### Exclusive Economic Zone (EEZ)

The EEZ comprises of the area which extends for a distance of 200 nautical miles from the nearest point of land from New Zealand, of which New Zealand has had control since the declaration of the EEZ in 1978.

### Fishery Management Areas (FMAs)/Fishstocks

There are 10 FMAs within the EEZ. For some species different FMAs are amalgamated. The fishstock is the combination of the species and area. For example, snapper in FMA 1 is fishstock SNA 1; HOK 1 covers all 10 FMAs.

### Fishing Permit

An appropriate fishing permit is necessary before a person can go commercial fishing. For most species, fishermen are not required to hold ACE prior to fishing.

### Fishing Year

The fishing year for the majority of species is 1 October to 30 September. Species managed from 1 April to 31 March include southern blue whiting, scallops and crayfish.

### FishServe

FishServe is the commercial name of Commercial Fisheries Services Limited that provides administrative services to the New Zealand Commercial Fishing Industry including quota balancing, fishing permit issue, vessel registrations, registration of ACE transfers and processing of fishing returns.

### Individual Transferable Quota (ITQ)

ITQ is the fundamental proportional property in any commercial fishery in the Quota Management System. This generates an Annual Catching Entitlement (ACE) each year. ITQ rights are maintained in a public register, are tradable in New Zealand, can be secured by registered mortgage and are issued in perpetuity.

### ISO 14001

ISO is the world's leading developer of International Standards. ISO 14001 consists of standards relating to environmental management systems and others which are specific tools for realising environmental policy and achieving objectives and targets.

### Marine Protected Areas (MPAs)

MPAs are protected areas within the New Zealand EEZ that are representative of New Zealand's marine habitats and ecosystems.

### Marine Stewardship Council (MSC)

MSC is an independent non-profit organisation that promotes responsible fishing practices by certifying sustainable fisheries.

### Ministry of Fisheries (MFish)

MFish is a government ministry whose primary purpose is to ensure that fisheries are sustainably used through an open and co-operative consultation with all user groups.

### New Zealand Biodiversity Strategy (NZBS)

NZBS is a government strategy to protect and enhance an overview of New Zealand's biodiversity.

### New Zealand Business Council for Sustainable Development (NZBCSD)

NZBCSD provides business leadership as a catalyst for change toward sustainable development. It aims to demonstrate business progress in environmental and resource management and corporate social responsibility and to share leading-edge practices among members.

### New Zealand Emissions Trading Scheme (NZ ETS)

The NZ ETS is designed to support efforts to reduce greenhouse gas emissions in New Zealand and was announced by the Government in September 2007. The NZ ETS design elements include the issuance of NZUs and the operation of an electronic register for recording and trading the NZUs.

### New Zealand Food Safety Authority (NZFSA)

NZFSA provides the Government, consumers and the food industry with information, analysis and advice on food safety issues for both domestic and export markets.

### New Zealand Seafood Industry Council (SeaFIC)

SeaFIC represents and promotes the interests of all sectors of the fishing industry. It provides economic information and advice, co-ordination of industry resources, and enhancement of the industry's profile in the community.

### New Zealand Unit (NZU)

A unit of emission in the New Zealand Emission Trading Scheme; in principle comparable to and backed by a Kyoto Unit.

### Quota Management System (QMS)

The QMS is the framework for the management of the main commercial fisheries in the New Zealand EEZ.

### Southern Seabird Solutions

A charitable trust formed in July 2002 to promote the adoption of fishing practices to avoid mortality of southern hemisphere seabirds.

### Total Allowable Catch (TAC)

TAC is the annual catch limit for each fishstock, determined before taking into account interests in the fisheries.

### Total Allowable Commercial Catch (TACC)

TACC is the annual catch limit for each fishstock, determined after taking into account recreational and non-commercial interests in the fisheries.

## Sanford welcomes your comments on our 2009 Annual and Sustainable Development reports

This year the Sustainable Development Report is published online only. We would greatly appreciate your feedback on both our Annual and Sustainable Development reports to help us develop even better publications next year. For your convenience we have prepaid the postage (place completed form in an envelope and send to FreePost 173356, Sanford Limited, PO Box 443, Shortland Street, Auckland 1140) or you can fax to +64 9 309 1190.

### 1) How do you rate our Annual and Sustainable Development reports?

	Annual Report			Sustainable Development Report		
<b>Presentation</b>	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor
<b>Comprehensiveness</b>	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor
<b>Clarity of information</b>	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor
<b>Clarity of figures/tables</b>	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor
<b>Credibility</b>	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Poor

**Comments:**

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### 2) Which section appealed to you most and why?

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3) Did you receive the Annual Report in hard copy this year?  Yes  No

4) Did you access the Sustainable Development Report on our website?  Yes  No

5) Please indicate how you would like to receive future annual reports.

**Review (Directors' statements, management reports and summary financial statements)**

Website  Printed  Not at all

**Audited Financial Statements**

Website  Printed  Not at all

**Sustainable Development Report**

Website  Printed  Not at all

6) Do you have any additional comments or questions (e.g. information you would like to see included)?

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7) What stakeholder group do you belong to?

- Sanford shareholder  International customer  New Zealand customer  
 Sanford employee/family  Contractor/supplier  Community member  
 Other (please specify)

For more information or to view a copy of the Annual and Sustainable Development reports online please visit our website at [www.sanford.co.nz](http://www.sanford.co.nz) or contact us on +64 9 379 4720.





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