Appendix 34

AUDIT COMMITTEE

The Department's Audit Committee comprises the Director-General, Deputy Director, Director Corporate Services and Principal Manager Administration and Finance. The Department's internal and external auditors attend all committee meetings.

The committee met during the year to monitor and implement audit recommendations. Audits and reviews completed included the following:

- aquaculture permits and fees
- Port Stephens Fisheries Centre administration and financial review
- regional office review Albury
- Gaden Fisheries Centre
- IT risk assessment
- recreational fishing licensing system
- industry funded grants.

Appendix 35

TRUST FUND REPORT

Six special fisheries trust funds have been created under Division 3 of the *Fisheries Management Act 1994*. Money held in these trust funds is under the control of the Minister and can be spent by the Minister only for the purposes authorised by the Act, in consultation with ministerial advisory committees.

The activities funded by each of the trust funds during 2003-04 are outlined below. Expenditure estimates include a number of assumptions relating to allocated shared costs, overheads and flow of benefits from projects to different programs.

Recreational Fishing (Freshwater) Trust Fund

Project	Total available 2003-04* \$'000	Actual expenses 2003-04 \$'000	Carry forward \$'000
Bass habitat mapping	37	37	***
Carp Assessment & Reduction Program	13	13	
Dollar-for-dollar Native Fish Stocking Program	200	177	23
Eastern Cod Stocking Program	20	0	20
Effectiveness of stocking research	160	86	74
Enhanced Departmental fish production	300	322	
Fishcare Volunteer Program	283	167	116
Fisheries management strategy on fish stocking	115	116	
Fisheries management strategy on recreational fishing	0	3	
Fisheries officers (6 inland)	625	551	74
Habitat (wetland) restoration grants	195	125	70
Impoundments Access Program	35	12	23
Meeting expenses	18	12	6
Recreational fishing expenditure survey	65	65	•••
Recreational inland management	199	183	16
Regional fish habitat management	308	314	
Small Grants Program	20	16	4
Statewide angler survey	13	0	13
Tournament Monitoring Program	150	137	13
Total	2,756	2,336	452

^{*} The "total available 2003-04" consists of allocations from the trust fund in 2003-04 and amounts carried forward from 2002-03.

Bass habitat mapping

This project involves anglers in mapping habitats of three key bass rivers, the Macleay, Hawkesbury and the Shoalhaven, to establish a baseline for long-term monitoring. Aerial photographs have been examined and overlaid with data collected in the field. Relevant features such as snags, eroded banks and vegetation cover have been classified and the number, length and area of habitat features calculated.

Carp Assessment and Reduction Program

The program was a whole-of-government initiative jointly funded by a number of State agencies. The program had several major components including: harvesting carp commercially; supporting recreational carp fishing competitions; researching carp control methods; researching the distribution of carp in NSW; and providing education programs for community groups. Research was also undertaken into innovative ways of controlling carp populations, such as the development of 'daughterless carp' technology. Note: this funding was not provided from recreational licence income.

Dollar-for-dollar Native Fish Stocking Program

The program involves matching funds from angler and community groups to purchase native fish from private hatcheries to stock rivers and dams. Typically, 80 per cent of funds are used to stock inland native fish (Murray cod and golden perch) with the other 20 per cent used to stock Australian bass. During 2003-04, 536,000 golden perch, 225,000 Murray cod and 230,000 bass were stocked, a record number. The program supports private hatcheries, increases stocking rates and increases compliance with reporting requirements for stocking groups.

Eastern Cod Stocking Program

This conservation stocking program is part of the Eastern Cod Recovery Plan. Funding supports essential research into genetic factors and will lead to more effective stocking practices.

Effectiveness of stocking research

The Effectiveness of Stocking Research Program provides estimates of mortality and survival rates of stocked fish, the contribution of stockings and percentage returns to the angler. Several impoundments and rivers have been stocked with marked fish including rainbow trout, Murray cod, golden perch and Australian bass. The program will greatly contribute to the development of a stocking strategy for NSW freshwater waterways and will provide data for the fish stocking fisheries management strategy.

Enhanced Departmental fish production

Government hatcheries at Narrandera Fisheries Centre, Gaden Trout Hatchery (Jindabyne), Dutton Trout Hatchery (Ebor) and Port Stephens Fisheries Centre receive funding to boost production of native fish species including trout, salmon, Australian bass, Murray cod, golden perch and silver perch. Many of the most important impoundments do not support native fish breeding, thus the stocking of fish in these impoundments supports significant recreational fishing activity. The program also funds NSW Fisheries technician positions at Narrandera, Jindabyne and Port Stephens hatcheries. During 2003-04 a record total of 7.5 million fish were released from Government hatcheries.

Fishcare Volunteer Program

The freshwater Fishcare Volunteer component constitutes a State coordinator's position (jointly funded by the saltwater and freshwater trusts) and an education officer's position based in Bathurst. The role of the former is to set the overall direction, policy and procedures for the program, guide the work of education officers and coordinate Statewide education programs. The education officer trains and supports Fishcare Volunteers in inland NSW and also supports other community programs, such as fishing clinics and school visits. The education officer currently manages a total of 83 volunteers in the Armidale, Bathurst, Orange, Forbes/Cowra, Albury/Corowa, Mudgee/Scone, Tamworth, Wagga Wagga and Yass regions.

Fisheries management strategy on fish stocking

A fisheries management strategy and associated environmental assessment on fish stocking are being prepared. The draft strategy seeks to improve the ongoing management of freshwater fish stocking by incorporating comprehensive measurement of hatchery production, performance and compliance and to ensure that stocking is conducted in an ecologically sustainable manner.

Fisheries management strategy on recreational fishing

As many diverse issues must be considered in formulating the recreational fishing management strategy and associated environmental assessment, NSW Fisheries is developing discussion papers on such topics as saltwater and freshwater bag

and size limits, fishing competitions, spearfishing and charter boats. The community is being encouraged to have their say. Some anglers are already involved through the Advisory Council on Recreational Fishing and specially formed management planning committees.

Fisheries Officers

Six inland fisheries officer positions are funded at Inverell, Bathurst, Wellington, Cooma/Jindabyne, Albury and Buronga for compliance purposes. Compliance activities are conducted in all inland areas, including the Murray and Murrumbidgee rivers, inland impoundments, Darling River and tributaries and highland trout waters.

Habitat (wetland) restoration grants

The Habitat Restoration Program provides matching funding to community organisations for freshwater fish habitat restoration projects. A range of stakeholders such as angling clubs, local councils, individual landholders and Rivercare and Landcare groups carry out projects in collaboration with conservation staff from NSW Fisheries. The 12 projects funded in 2003-04 will lead to the rehabilitation of 100 hectares of floodplain and wetland habitat and 26 kilometers of riverbank.

Impoundments Access Program

A project officer is part funded to negotiate improved access to impoundments and to develop a book on access to NSW stocked reservoirs. The guide will detail information on impoundment stocking histories, access points and amenities provided at dams. Increased access to impoundments for anglers will improve angling opportunities, decrease pressure on wild fish stocks and stimulate regional economic activity.

Meeting expenses

Funding is provided for meeting expenses for the administration of the Recreational Fishing Freshwater Trust Expenditure Committee including travel to and from meetings, sitting fees, catering and accommodation expenses. The committee reviews recreational fishing licence programs and advises on new funding proposals. There are eight committee members: three representatives from east of the dividing range; three from the highland and western slopes; and two far west representatives.

Recreational fishing expenditure survey

No funds were expended on this program. All funds have been returned to the Freshwater Trust for allocation to other programs.

Recreational inland management

Funding is provided to employ an inland recreational fisheries manager based at Tamworth. The position is chiefly responsible for management activities associated with coordinating the community and Government fish stocking programs, the Small Grants Program and the Freshwater Trust Expenditure Committee. The manager also plays a key role in community liaison.

Regional fish habitat management

The Regional Fish Habitat Program funds employment of two inland conservation managers. They are responsible for activities including weir review, fishway installation, managing the habitat grant program, impact assessment, education, recovery planning for threatened species and coordinating implementation of the Murray-Darling Basin native fish strategy.

Small Grants Program

The program provides seed funding for community groups and other organisations for projects designed to enhance freshwater recreational fishing opportunities. During 2003-4 five projects received funding: Eastern cod research, Upper Clarence River; Marsden weir redevelopment, Goulburn; fishing platform improvements, Toonumbar Dam (Kyogle); fish cleaning table/measuring station, Lake Keepit (Gunnedah) and an inland fishing awareness and skills program at Narromine High School.

Statewide angler survey

No funds were expended on angler surveys this year.

Tournament Monitoring Program

Angling catch and effort data is being collected at approximately 45 freshwater tournaments each year. Using a fishing report kit, anglers record the length of fish caught and the time spent fishing. This allows for the calculation of a catch rate (number of fish caught per angling hour or angling trip), which can be compared from year to year and between different waterways. The information collected is assisting fisheries managers to evaluate the success of strategies to improve recreational fishing. So far more than 18,000 anglers have taken part in this research, recording 210,000 hours of fishing effort and over 85,000 fish captures.

Recreational Fishing (Freshwater) and (Saltwater) Trust Funds

The following three projects are funded on a one-third two-thirds basis by the respective special fisheries trust funds.

Project	Total available 2003-04*	Actual expenses 2003-04	Carry forward
	\$'000	\$'000	\$'000
Fishing promotion	101	108	***
Information & Advisory Program	286	286	***
Recreational fishing fee administration	905	946	
Total	1,292	1,340	

^{*} The "total available 2003-04" consists of allocations from the trust fund in 2003-04 and amounts carried forward from 2002-03.

Fishing promotion

The expenditure committees recognise the need to inform anglers about the recreational fishing licence in NSW. The information project entails distribution of information about the fishing fee including its purpose and fee exemptions.

Information and Advisory Program

This program involves the management of fishing clinics and the updating and distribution of the saltwater and freshwater fishing guides throughout the State.

Recreational fishing fee administration

With the introduction of the all-waters recreational fishing licence, the NSW Government made a commitment that not more than 10 per cent of the licence revenue would be spent on administration.

Administration of the licensing system ensures the efficient servicing of enquiries from licence sales agents and licensed recreational fishers. It also covers running costs associated with maintenance of the licence sales network, licence printing, postage, financial management and audit requirements, data management and payment of the five per cent agent commission to standard agents.

Recreational Fishing (Saltwater) Trust Fund

	Total Available	Actual Expenses	Carry Forward
Project	2003-04*	2003-04	
	\$'000	\$'000	\$'000
Communication & education	143	143	
Estuarine fish biology	233	152	81
Fish Aggregation Device Program	156	167	
Fishcare Volunteer Program	677	449	228
Fisheries Officers	1,052	1,052	
Fisheries management strategy on recreational fishing	0	0	
Gamefish Tagging Program	169	106	63
Licence research database	82	82	
Marine recreational management	93	93	
Maximising survival of line-caught fish	153	61	92
Meeting expenses	31	26	5
Pilot Habitat Restoration Program	114	50	64
Recreational fishing haven loan repayment	2,000	2,000	***
Recreational fishing haven survey	308	237	71
Recreational harvest of baitfish in NSW	171	129	42
Recreational mobile squad	405	374	31
Selection of recreational fishing havens	230	124	106
Small Grants Program	121	72	49
Striped marlin economic survey	88	69	19
Tournament Monitoring Program	157	130	27
Trust fund executive officer	299	156	143
Sub-total	6,682	5,672	1,021
Direct payments:			
Assessment of recreational fishing havens in northern NSW	118	118	
Capacity development for recreational	28	14	14
fishing committee representatives			
Economic recreational survey of two coastal towns	89	67	22
Expenditure patterns of Sydney recreational fishers	18	18	
Identifying mulloway sites	24	13	11
Impact of restocked mulloway fingerlings	79	79	
Marine Discovery Centre, Bondi Beach	50	50	
Study of landed fish at game fishing tournaments	22	22	
Validating age estimation of key recreational fish species	38	19	19
Sub-total	466	400	66
Total	7,614	6,472	1,087

^{*} The "total available 2003-04" consists of allocations from the trust fund in 2003-04 and amounts carried forward from 2002-03.

Communication and education

Licence fees support a range of projects aimed at educating the community about responsible fishing and fishing rules. Activities included the management and enhancement of fishing clinics along the coast; participation in community events and schools education programs; informing the community about fishing rules through advertisements, posters and flyers; and updating and distributing the recreational fishing guides.

Estuarine fish biology

NSW Fisheries is investigating the biology of black bream and luderick, collecting fish samples from estuaries using rod and line, gill and seine nets and traps. The reproductive biology of the species will be assessed by determining the time of reproduction, the size and age at first maturity and relationships between spawning and environmental conditions. Length at age, relationships and growth will also be evaluated to assess variations in the size, age, sex and reproductive structure of populations in different estuaries and habitats and the influences of environmental conditions on populations. As part of

the study, black bream and luderick are being tagged in order to study their movement patterns. This study is providing information on the status and structure of NSW black bream and luderick populations which will ensure sustainable management of these key recreational species.

Fish Aggregation Device (FAD) Program

A total of 12 FADs were placed along the NSW coast for the direct benefit of recreational offshore and sport fishers in 2003-04. Another three will be deployed in 2004-05. The FADs provide an effective fishing location for anglers wanting to target seasonal pelagic fish species such as dolphinfish, while allowing fisheries managers and researchers to assess the effectiveness of the devices and their value to recreational fishers. Recreational anglers are encouraged to participate in fisheries research by completing logbooks detailing their fishing around the FADs. The program also aims to optimise FAD location and design, and to refine deployment and maintenance techniques to ensure cost effectiveness.

Fishcare Volunteer Program (saltwater)

The successful Fishcare Volunteer Program, now in its fourth year of operation, spans 13 coastal and 13 inland locations throughout NSW. There are 336 volunteers. Volunteers take part in mainstream activities such as research, fishing clinics, angler interviews, events, school visits/guided tours, habitat restoration and administration. The volunteers complete two-day induction training and one-day field training courses. Enhancement training is then provided over the duration of their involvement in the program. In 2003-04, volunteers gained national television coverage on the Channel 9 *Escape with ET* program and the ABC children's *Creature Features* program. The Fishcare Volunteer Program is run by a State coordinator and four regional education officers.

Fisheries Officers

Ongoing funding has been provided for nine coastal Fisheries Officer positions to enhance the level of compliance and advisory services. Officers are based in the Clarence, Hastings, Port Stephens, Hunter, Sydney (two), Shoalhaven, Batemans Bay and Far South Coast regions.

Fisheries management strategy on recreational fishing

As many diverse issues must be considered in formulating the recreational fishing management strategy and associated environmental assessment, NSW Fisheries is developing discussion papers on such topics as saltwater and freshwater bag and size limits, fishing competitions, spearfishing and charter boats. The community is being encouraged to have their say on this major initiative. Some anglers are already involved through the Advisory Council on Recreational Fishing and specially formed management planning committees.

Gamefish Tagging Program

The program aims to provide scientific information on the distribution, movement, growth and exploitation of billfish, tuna, sharks and sportfish. Running since 1973, the tagging program is the largest of its kind in the world and encourages gamefish anglers to participate in fisheries management and research. The project provides the only tag/recapture information on species such as black marlin, sailfish, albacore, dolphinfish and sharks. A small plastic tag has recently been introduced for small pelagic fish such as dolphinfish and kingfish.

Licence research database

Information on the number and distribution of recreational fishers is important for the management of recreational fishing and the conservation of fish stocks. This project involves the development and maintenance of a database of the anglers who buy the recreational fishing licence. The database provides a broad geographic and fisheries based picture of the NSW recreational fishing community. It has been used for various research projects, including expenditure surveys to show the importance of recreational fishing and the national recreational and indigenous fishing survey (recently completed).

Marine recreational management

Funds have been allocated to a range of marine recreational management activities. These include providing advisory information to angling groups, stocking groups and stakeholders; consulting and corresponding with fishing clubs and other key stakeholder groups; responding to angler inquiries; collating community submissions; and maintaining a database of over 800 NSW-based recreational fishing clubs.

The Advisory Council on Recreational Fishing provides high quality advice to the Minister on matters relating to recreational fishing. The council plays a key role in consultation on changes to recreational fishing and advises on the feasibility and acceptability of management initiatives. The council is required to meet at least four times a year and also considers issues out of session. Expenses associated with council meetings are funded by the trust.

Maximising survival of line-caught fish

Due to the increasing popularity of catch and release fishing, the trust is funding a study aimed at investigating the survival of fish caught by line fishing methods by recreational anglers and then released. There is a lack of information on the survival of released fish for nearly all species. The study will identify detrimental hooking, handling and release procedures and establish strategies for enhancing the survival of large numbers of released caught fish. The Department hosted the Botany Bay Catch and Release Research Challenge in February 2004 as part of the study. Participating anglers provided 356 fish caught (including bream, trevally, snapper and flathead) to NSW Fisheries scientists. These fish were held in sea cages, monitored over time, and then released back into the bay. The data is being analysed to determine the main factors that contributed towards the observed mortalities.

Meeting expenses

The Recreational Fishing Saltwater Trust Expenditure Committee advises on priorities for expenditure from the Recreational Fishing (Saltwater) Trust. There are 12 anglers representing eight regions along the coast and coastal Statewide groups with interests in recreational fishing. The committee met four times during 2003-04 and was also requested to consider issues out of session. Expenses associated with the committee meetings included sitting fees, travel expenses and accommodation.

Pilot Habitat Restoration Program (Clarence)

The program aims to encourage community involvement in fish habitat rehabilitation projects within the Clarence River catchment. In 2003-04 \$55,000 from the Trust was matched with over \$220,000 of external funding. The first round of projects helped to restore tidal flows, habitat and fish passage to 37 hectares of estuarine wetlands; remove a section of a levee and restore natural tides to 50 hectares of former estuarine wetland; open a floodgate to 171 hectares of wetland; fence 1.4 hectares of riverbank; and rehabilitate 3 hectares of river frontage. In 2004-05 \$55,000 from the Trust for fish habitat restoration projects will be matched with another \$222,000 proposed external funding.

Recreational fishing haven loan repayment

The recreational fishing havens established in 2002 were funded through a \$20 million loan from Treasury. The Treasury loan repayments schedule requires that repayments of \$2 million be paid in each financial year. Payments of \$1,000,000 were made on 31 December 2003 and 30 June 2004.

Recreational fishing haven survey

This project is designed to assess changes in the catch and effort of recreational fishers following the declaration of recreational fishing havens in Lake Macquarie and Tuross Lake. The study repeats previous creel surveys in 1999-2000. In the first three months of the survey, more than 2,380 fishing parties, representing catches of 5,130 people, were interviewed by community volunteers, Fishcare Volunteers and NSW Fisheries staff.

Recreational harvest of baitfish in NSW

The project's primary objective is to provide reliable estimates of the quantities of blue mackerel taken by the recreational sector and thereby determine the total impacts of fishing and to make informed decisions about resource sharing amongst stakeholders. Preliminary results indicate that the size of fish and proportion of females increases with increasing latitude and that there are major differences in abundance and distribution of bait species between locations and seasons. NSW Fisheries staff are also working with researchers from South Australia and Tasmania to determine the location and timing of spawning for estimation purposes. Preliminary sampling has found that the eggs are coastally associated and concentrated in northern NSW and southern Queensland.

Recreational mobile squad

The Saltwater Trust funds a recreational mobile squad of three Fisheries Officers based at Brooklyn for the protection of the State's coastal recreational fisheries. The squad maintains a regular and strategic presence in all recreational fishing havens and, in 2003-04, checked 3,955 anglers, 723 recreational boats and 49 commercial boats in numerous compliance operations.

Selection of recreational fishing havens

Anglers along the NSW coast are benefiting from the new recreational fishing havens – 30 areas closed to commercial fishing which help give anglers a fairer chance of catching fish. The havens were created following extensive local community consultation. Around 50,000 discussion papers were distributed, more than 10,000 written submissions received and results of 62 public meetings considered. The final areas were recommended by anglers overseeing the Recreational Fishing Trusts and accepted by the Minister. A total of 251 fishing businesses were bought using the \$20 million loan from Treasury. Repayments on the \$20 million crown advance to fund the buyout of licences commenced in December 2002.

Small Grants Program

The program gives fishing clubs, councils and other community members the opportunity to obtain funding for small, local or regional projects that enhance recreational fishing. Funding proposals are limited to \$5,000 and should be matched by funds from the applicant or other sources.

The project is funding:

- the installation of fish cleaning tables
- three fish measuring stations
- an outdoor display centre
- a weed bait tank
- · removal of a weir
- three research studies investigating bream, luderick and estuary perch
- angel rings
- two educational pamphlets.

Striped marlin economic survey

The trust is funding an economic survey of the striped marlin fishery to assess the comparative economic benefits of the use of the striped marlin resource by recreational and Commonwealth-licensed commercial fishers. The findings, which should be released in 2004-05, will assist decision-making on the future use and management of striped marlin.

Tournament monitoring program

Angling research is being conducted at fishing tournaments throughout NSW. The project monitors a wide range of events in both freshwater and saltwater fisheries. Competitors complete fishing report forms on which they record the number of fish captures, fish measurements and the time spent fishing. This information is used to determine an angling catch rate (ie the number of fish caught for every hour spent fishing in the particular area) and the fish population structure in each fishery. With the assistance of 1,500 anglers, the saltwater project has recorded the capture of over 20,000 fish during 4,000 days of angling in 2003-04.

Trust Fund executive officer

The trust is funding an executive officer to the Saltwater Expenditure Committee and to the Advisory Council on Recreational Fishing to ensure transparent reporting; communicate the work of the committee to fishing clubs and the broader community; and provide a conduit for angler views to the committee. The executive officer oversees the implementation and delivery of trust-funded programs and monitors and reports on trust fund budgets. The executive officer also takes responsibility for trust-funded projects meeting their financial or work- related goals.

Direct payments

Assessment of recreational fishing havens in northern NSW

The Saltwater Trust is funding a study to determine the effectiveness of recreational fishing havens in improving recreational angling in northern NSW. Southern Cross University will undertake research to answer such questions as:

- Are there more fish species of recreational importance within the havens by comparison to areas adjacent to havens?
- Are there higher recreational catches within havens compared to areas adjacent to havens?
- Do anglers have a better angling experience in systems that contain havens?

Sampling will be undertaken in three havens – the Tweed River, Richmond River and Camden Haven River. These river systems are different sizes, provide various habitat types and are not completely closed to commercial fishing. Data will be collected on the composition, abundance and size of key recreational fish species within and adjacent to the havens. Angler surveys will gauge angler attitudes regarding haven implementation and benefits.

Capacity development for recreational committee representatives

The trust is funding a program to improve skills of recreational fishing committee members.

Economic recreational survey of two coastal towns

Coastal communities in regional NSW are believed to be particularly dependant on recreational fishing. Current information shows that tourism-generated income is a key form of community income in most coastal communities. The study aims to

estimate the total expenditure by recreational fishers in two communities, Port Macquarie on the north coast and Narooma/Bermagui on the south coast. The study will increase understanding of the importance of recreational fishing to local economies and the link between tourism and the recreational fishing industry in a typical coastal town. The study also hopes to document the satisfaction of recreational fishers with the facilities and services provided.

Expenditure patterns survey of Sydney recreational fishers

A survey of Sydney recreational anglers was carried out in 2003-04 to determine the importance of expenditure by these anglers in metropolitan and regional communities. A total of 1,200 people with recreational fishing licences were surveyed. The results indicate that Sydney licensed anglers alone spend up to \$134 million a year on fishing trips along the NSW coast. This spending directly supports an estimated 1,200 jobs and indirectly supports 970 jobs. As well as the spending on sport-related items such as tackle and bait, anglers also rely heavily on tourism services, including accommodation, entertainment and boat hire.

Identifying mulloway sites

The University of NSW is using ultrasonic tags to track mulloway and collect data on their daily and seasonal movements. Researchers catch mulloway in Botany Bay and surgically inject tags into the abdomen of the fish for tracking purposes. The tracking information will provide estimates of the home range and preferred habitat of mulloway and also inform decisions on the appropriate densities for any future stocking activities in NSW estuaries.

Impact of restocked mulloway fingerlings

The study is investigating the impacts of releasing mulloway in controlled numbers into estuaries in NSW. Researchers from the University of NSW are examining the gut contents of recaptured stocked mulloway to determine what they eat. The information will be used to assess the impact of stocked fish on wild stock food sources such as other fish and prawns. All fish stocked have been marked with a harmless dye to enable identification from wild fish. Researchers are also investigating the growth and survival of the stocked fish. Preliminary results of the 80,000 mulloway stocked in Botany Bay and 50,000 stocked in Smiths Lake indicate good initial survival and growth rates.

Marine Discovery Centre, Bondi Beach

Funds from the Recreational Fishing Trust have been allocated to the enhancement of the Bondi Marine Discovery Centre, Bondi Beach, a non-profit organisation that offers marine and coastal education excursion programs to schools and communities in the Sydney region. Located within the Bondi Pavilion, the centre features an interactive aquarium, museum and educational arcade. School programs include visits to the local marine environment, slide shows, talks and presentations using individual aquariums for close-up investigation. The centre will also provide educational facilities for communities from non-English speaking backgrounds.

Study of landed fish at game fishing tournaments

Funding from the Saltwater Trust has fostered a partnership between gamefishing and science in NSW to study the life cycles of gamefish and sharks. Local and international scientists and NSW Fisheries staff attend gamefishing tournaments to study landed fish. In 2002-03 they analysed 142 individual gamefish from 10 tournaments. The major outcomes of this research project include:

- determining the stock structure of gamefish throughout their oceanic ranges
- determining age and growth rates of marlin, tunas, make and tiger sharks and mahi mahi
- establishing that the retina of billfish is split into two parts one for colour vision and the other for blues and purples in deep water.

Validating age estimation of key recreational fish species

The trust is funding a study to provide an ageing technique for key recreational fish species. The two-year study will investigate early growth of species such as luderick, sand whiting, dusky flathead, yellowfin and black bream. Information on age and growth is essential for stock assessments of fish populations. The study aims to find out how old a fish is at any given size and the age at which a fish reaches minimum legal length, among other information.