

ANGLING IN NAMIBIA



Peter Tarr

EVERY year thousands of recreational anglers and tourists flock to the Namibian coast, particularly during the summer recess. During this period, Namibia's popular holiday resort Swakopmund comes to life. The fishing and holiday town of Henties Bay and the industrial harbour town of Walvis Bay also play host to thousands of fishermen. The campsites north of Swakopmund seem to burst at the seams with holiday makers. The sites, with names such as Mile 14, Jakkalsputz, Mile 72, Torra Bay and Terrace Bay, are administered by the Ministry of Environment and Tourism.

ROCK AND SURF ANGLING

Rock and surf angling is restricted to about 20 percent of the 1400 km long coastline. The rest has been declared nature conservation or diamond mining areas and is mostly closed to shore-bound anglers. The accessible areas stretch from Sandwich Harbour to the Ugab River with the exception of the Cape Cross Seal Reserve.

Terrace Bay in the Skeleton Coast Park is open to the public throughout the year. Most of the approximately 4 000 annual visitors are recreational anglers. Torra Bay, also in the Skeleton Coast Park, is open only in December and January, attracting about 1 600 people during the holiday season.

There has been a marked decrease in the number of anglers from South Africa since Namibia introduced the new Sea Fisheries

BY
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Act (Act 29 of 1992). According to this legislation only 60 kg of fish or 60 whole fish, of which not more than 16 kg or 16 fish may be galjoen, may be transported in a vehicle, irrespective of the number of anglers in the vehicle.

No statistics are available on the actual number of recreational anglers visiting the entire coast or the number of fish they catch. An angling permit system will be introduced in the near future. The system is aimed at gaining more information and a better understanding of the impact of anglers on certain fish species, rather than enforcing angling regulations.

COMPETITIVE ANGLING

Fourteen registered angling clubs compete in regular angling competitions throughout the year. Competitions are divided into three categories, namely rock and surf, light-tackle boat and ski-boat angling.

During the 1994 season, the Namibian Rock and Surf Angling Association held nine interclub, prestige, national and international fishing competitions. A total of 757 anglers participated in these competitions. The competitors usually target inedible fish which earn them more points per unit effort than do edible fish. Various club and social angling competitions were also held as well as light-tackle boat competitions.

About 750 rock and surf anglers participate in the annual Bonanza Angling Competition

which is held each year on 26 December, with prizes worth N\$20 000. On 31 December every year about 80 anglers on 20 ski-boats participate in a ski-boat angling competition off Swakopmund.

COMMERCIAL SKI-BOATS

As no control was previously exercised over fish landed by ski-boats, there are no pre-1994 data on the commercial ski-boat industry. Since then ski-boat catches have been monitored on a regular basis. Six ski-boats from Swakopmund and Walvis Bay were registered in 1994. Unlike other commercial fishing rights, no total allowable catches or other restrictions were set for ski-boats. In the first monitored period from January to October 1994, three ski-boats operating from Swakopmund had caught about 26 700 kg of fish.

COMMERCIAL LINEFISH BOATS

During 1993 six companies with linefish boats held commercial fishing rights, while five new companies became holders of commercial linefishing rights in 1994. The number of linefish boats operating, however, has not changed as some of the companies do not use their fishing rights. No total allowable catches or any other restrictions were imposed on these boats. Linefish-boats operate along the entire Namibian coast and off-load their catches at factories in Walvis Bay.

With all these activities exploiting the same resource, sound management is needed to ensure their sustainable utilisation. With increasing pressure on our popular angling species over the last few years, there has been a marked decline in the number of fish caught per angler. The main target species include cob, steenbras, dassie, galjoen, snoek and barbel. Preliminary results indicate that steenbras and dassie have become scarce in the open areas where they were previously considered to be abundant.

RESEARCH ACTIVITIES

The Linefish Section of the Ministry of Fisheries and Marine Resources conducts extensive research on angling fish to determine the possible effects of fishing pressure on the different angling fish populations. Research aims to determine and monitor the status of fish with special emphasis on the six species mentioned above. If results indicate that stocks cannot sustain the pressure of utilisation, conservation measures will be implemented.

Research on recreational angling currently concentrates on fish tagging to determine migratory behaviour and seeding rates. This will also help determine stock identity and verify growth rates. The Section also monitors angling competitions and analyses catch statistics from anglers.

For the Namibian Angling Fish Tagging Project, fish are caught with rods and reels from the shore. The fish are measured,



Johan Jooste

Freshwater angling is not a major activity in Namibia, but fish from our inland waters are an important source of food for people in the north. Children try their luck in the Okavango River near Rundu.

weighed, tagged and released. Tagging is done at different places between Meob Bay in the south and the Kunene River mouth in the north throughout the year. Fish are tagged with a yellow plastic coated nylon T-bar imprinted with a serial number and the words *Fisheries Namibia*. Since the project began in 1990 a total of 15 300 fish of different species have been tagged and released. (See Table 3)

To date 207 or 1,35 percent of tagged fish have been recaptured, providing valuable data on fish movements. The longest recorded distance covered by a fish was that of a galjoen, which was tagged at Torra Bay and recaptured at Stilbaai on the South African coast, having travelled a distance of 2 483 km in just over a year.

Preliminary results indicate that tagged fish tend to migrate southwards from the closed



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A satisfied angler with a steenbras caught south of Walvis Bay. Strictly enforced bag limits help to ensure that the occasional "big one" can still be landed off our beaches.

areas into the open areas. A few instances have been recorded where fish (mostly steenbras) migrated north. Most of the recaptures, however, were caught within the same area where the fish were originally tagged and released. This is especially true of fish tagged in the open areas and the cob population at the Kunene mouth. Steenbras and cob from Meob Bay, however, disappear during the winter months, only to reappear in the same area during mid-summer. More fish will have to be tagged at various locations before any hypothesis on fish migration or seasonal movements can be tested statistically.

Fish are also biologically sampled during these tagging surveys and data analysed to obtain information on aspects such as the length/weight and sex ratios, breeding cycles and reproductive behaviour, stomach content and ageing. Ageing is determined by calculating the annual growth rings in the otolith (earbone) of fish. This information can be used to estimate the growth rate of the fish.

Linefish research activities aim to improve our understanding of this complex fishery and to supply management with recommendations that will ensure the long-term sustainability of the angling fish stock.

Table 1 Statistics of interclub angling competitions in 1994

Date	Place	Division	Number of anglers	Edible fish (kg)	Other fish (kg)
09.10.94	Mile 14	League	187	127,34	2 145,35
09.10.94	Mile 14	White fish	22	35,1	
05.02.94	Horingbaai	League	199	61,9	1 555,6
05.02.94	Horingbaai	White Fish	30	28,95	
19.03.94	Mile 8	Nationals	60	61,3	4 421,5
14.05.94	Bennie's	League	171	174,45	63
14.05.94	Bennie's	White fish	22	13,4	
27.08.94	Mile 30	Prestige	38	15,45	547,6
09.11.94	Various	Internationals	28	10,3	6 816,3
Total			757	528,19	15 549,3

Table 2 Synopsis of aspects of six angling fish species

Species	Distribution	Biology	Breeding	Exploitation
Cob <i>Argyrosomus hololepidotus</i>	Entire coast, coastal to 150m, juveniles inshore	Predator, mature at 75cm, + 4 years, summer	Gonochorist, Summer,	Commercial and recreational catch
Steenbras <i>Lithognathus aureti</i>	Entire coast, surf-zone	Omnivore, mature at + 40cm, inshore shoaling	Protandrous, Late summer	Prime species for anglers and commercial boats
Dassie <i>Diplodus sargus</i>	Entire coast in rocky areas	Carnivore, mature at + 35cm, summer spawning	Hermaphrodite, All year peak in summer,	Not commercial, recreational and ski-boat
Galjoen <i>Corasinus capensis</i>	Endemic to southern Africa, inshore reefs and rocky areas	Omnivore, mature at + 35cm, summer spawning	Serial spawning	Not commercial, Prime recreational angling special
Snoek <i>Thyrstites atun</i>	Entire coast, vast migration, pelagic shoaling	Shoaling predator mature at + 60cm, winter spawning	Gonochorist	Seasonal, commercial
Barbel <i>Galeichthys feliceps</i>	Entire coast on muddy and sandy bottom	Omnivore, spring spawning	Gonochorist, Paternal mouth brooder	Commercial and recreational

Table 3 The number of fish tagged from 1990 to November 1994

Species	1990	1991	1992	1993	1994	Total
Cob	290	945	1 775	1 350	2 845	7 205
Steenbras	17	581	979	871	1 395	3 843
Dassie	147	239	124	395	243	1 148
Galjoen	115	129	124	187	115	670
Barbel	88	194	76	213	209	780
Other	35	247	366	548	458	1 654
Total	692	2 335	3 444	3 564	5 265	15 300