

GRANDACOY OR TARPUM.

LAKE CHARLES, La., March 10.—*Editor Forest and Stream:* As usual, when in want of information, I appeal to you. Can you, or any of your readers, tell me anything of a fish called the grand ecore (as nearly as I can write the name from the pronunciation), which is found here in profusion? Some of the fishermen claim it is the tarpon, others deny it; some say it takes the bait freely, others that it is caught, if at all, only by chance. Can some one who has fished for it—if any such there be—tell me the kind of tackle, size of rod, hook and line, best kind of reel, bait, time and manner of fishing, etc., and I'll do as much for you some time. H. P. UFFORD.

[The grandacoy, grand écaille, sabalo, savañilla, silver fish, tarpon or tarpum are some of the names applied to the large silvery herring-like fish which has recently achieved fame among anglers on account of its game qualities, combined with its enormous size and brilliant appearance. FOREST AND STREAM, Dec. 13, 1888, contains a good figure of the tarpum and a description of some of the tackle used in its capture. The writer of the article, "Lancewood," used 5-0 Kirby Limericks on a fifteen-thread line, and landed three tarpum, weighing 128, 135 and 147 lbs. respectively. Another paper is published in FOREST AND STREAM, Dec. 27, 1888. Mullet is used for bait, although the fish feeds upon any small fry that may be convenient. Some anglers use a 10-0 O'Shaughnessy hook and a No. 15 or 18 line line. Most anglers use a large bass reel. The reel is placed about a foot from the end of the rod; it should hold at least 500ft. of line, as the fish travels like a flash and is prodigiously strong. A bamboo striped bass rod in a single piece, 6 or 7ft. long, is employed, or a split-bamboo of about the same length in two pieces. Snells should be 30 to 36in. long, and the bait should be secured to the hook and snell by means of fine wire. The time for the fishing is on the flood tide. A good deal of activity will be required on the part of the boatman, to keep up with the fish. March and April are the best months for catching this fish with rod and line.]

WIRE LEADERS.

Editor Forest and Stream:

In last week's paper "Lancewood" asks for information about the wire leader. I procured a 9ft. sample leader from Messrs. Shipley soon after the advertisement appeared, and tried it in fly-fishing for bass last season. It is very pliable, in fact, as much so as gut, and is quite invisible in the water. After making a few casts with it (and it cast very nicely) about one-third of it with fly attached, snapped off, very much as I expected it would. As received by me there was no provision made for more than one fly, and I did not try to attach more than one, so the break was not caused by anything but a kink. I have never used it since, and for practical use the gut leader has little to fear from the wire leader, although it might possibly be better adapted for still-fishing.

HOLLIDAYSBURG, Pa. T. E. D.

Editor Forest and Stream:

In reply to your correspondent's inquiry concerning metal leaders I would say that I have found them unsatisfactory. On account of their attenuation and ductility they are very liable to knot or kink or loop. This weakens them, besides being very annoying. For leaders gut is still in the lead and is *gut* enough. O. O. S.
FREDONIA, N. Y.

Editor Forest and Stream:

In answer to "Lancewood's" query concerning the value of patent wire for leaders, I would beg to say that I tried a few of them last summer and find that they are not pliable enough, are very easily kinked, and when kinked are very easily snapped asunder. If "Lancewood" would order a sample foot or two he would very soon satisfy himself. WHITE MILLER.

DELAWARE, Ont.

SALMON SATIETY.

ONE morning in the summer of 1885, while the Albatross was at St. John's, a pair of fine salmon were seen lying on deck, and near them stood the native who had brought them on board. Some one remarked, "Those are magnificent fish." "Yes," said the native, "doze fish are de kings in Newfoundland; dey are de finest fish we has; but, dare now, you'll git sick of 'em mighty quick. We folks eats cod twenty-one times a week and takes it for lunch, and never gets tired on it; but 'twon't take you long to git tired of eatin' salmon."

We are informed by one who was on the Albatross at the time and who was very fond of salmon that he soon learned to appreciate the force of the fisherman's statement. The ward room table was supplied with an abundance of salmon for about ten days, by which time our informant had become so thoroughly satiated that he says he could not look a salmon in the face. He confesses to having obtained in that time a more thorough insight than he ever had before into the meaning of the old story about early Colonial laws which prohibited masters from compelling their apprentices to eat salmon more than three times a week. Trout were eaten by the same authority, on another cruise around the coasts of Newfoundland and Labrador, almost every meal for about a month, and the "hankering for fish" had not decreased.

DECREASE OF SEALS.—Late arrivals at St. John's, Newfoundland, from the Dundee seal fishery report a steady diminution in the number of seals. The fleet is constantly being decreased in size through sales of vessels and losses at sea, and the vacancies are not refilled. The oil is greatly reduced in price, as in the case of whale oil, by the introduction of petroleum products for lubricating and illumination. Some idea of the shrinkage of the industry may be gained from the fact that in 1857 more than 350 vessels were sealing from Newfoundland, while in 1885 the fleet included only twenty steamers and a few sailing vessels. A valuable account of the fishery was published in FOREST AND STREAM, July 2, 1885.

SALMON FISHING IN PUGET SOUND.—Governor Semple of Washington Territory, says of salmon fishing in Puget Sound, which certain anglers have decried as an impossibility or a failure on the Pacific coast: "To troll for them either a sail or rowboat may be

used, provided no greater speed than three miles an hour is attained. Pay out about 100ft. of line, and leave half that amount coiled in the boat, so as to be able to let a large fish have a run at the start. Such a precaution will often save your tackle from being broken, for these big fellows are of the same family as the trout, and will not surrender without a hard struggle. They have been known to describe a half circle with 60ft. of line, holding it as tight as a backstay and coming up from astern to a point nearly ahead while the boat was under full headway. They will sometimes suddenly dart away from alongside and go 30 or 40ft. diagonally downward, drawing the line across the keel of the boat with the apparent intention of rasping it in two against the barnacles. It requires great skill and patience to land one, even with the stoutest tackle, for you can never be sure that they will not tear the hook out with a back twist the moment you give them a bit of slack. If they fail in this maneuver they will often get the line caught behind their gills, and then they are an easy prey. In the height of the season great catches are sometimes made. A party of two recently killed twenty-five of these fish in half a day in Tacoma harbor, and landed only two-thirds of those that struck the trolls. The tackle was repeatedly broken by large fish in spite of every precaution, and the party landed with one damaged spoon out of half a dozen that were on board at the start. The catch weighed 200lbs."

PENOBSCOT SALMON.—The last number of the FOREST AND STREAM has an article upon salmon fishing in which it states that the fishing season has set in unusually early, and with a remarkable run of fish, this year, in the Canadian waters. From this we may anticipate an early opening of the season on the Penobscot, and those best acquainted with the habits of the king of fishes look for its appearance here early in April. Last year the first fish were taken April 27, which was the earliest on record. Manager T. F. Allen, of the Penobscot Salmon Club, is getting everything in readiness for business and will have the club house in first-class condition. The telephone wire, that was carried away by the freshet last spring, causing much inconvenience, has been replaced, this time below the dam where the ice or high water cannot affect it. Mr. Allen has laid in a stock of first-class flies, of the best make, adapted to the use of these waters. He also received, recently, as a present from Archibald Mitchell, Esq., of Norwich, Conn., the most enthusiastic and most successful of our visitors from abroad, a box of beautiful flies made by Mr. Mitchell himself, who is an adept to the business and occupies his spare moments in making all that he uses.—*Bangor (Me.) Whig.*

BLACKFORD'S TROUT OPENING.—Mr. E. G. Blackford's exhibition of trout on the opening day, next Monday, April 1, promises to exceed anything in the past. In addition to goodly specimens of all the varieties of trout reared at the State hatcheries, he will have a thousand half-pound live brook trout on exhibition in tanks. We can give no further details of the exhibition to-day, as arrangements are not yet completed, but we hope to be in a position next week to furnish full particulars. The opportunity should be improved for comparing in the flesh the several species, of which accurate drawings will be given in our next issue.

CHAUTAQUA LAKE.—Com. R. U. Sherman has selected a site for a State hatchery, and the work of stocking this beautiful body of water with muskallonge will be undertaken at once.

Trout Supplement next week.

Fishculture.

CHALEUR BAY PRODUCTS.*

FROM Mr. Mowat's extremely interesting and valuable review of the fisheries of Chaleur Bay we learn that cod banks extend into the bay about sixty miles from its entrance and forty miles seaward. Lobsters are caught on its shores on both sides. Five salmon rivers fall into its north shore, and on the south is the noted Nepisiguit. The Restigouche, with its branches extending north and west 140 miles, furnishing a fresh-water surface of nearly 400 miles on which salmon spawn, is the principal nursery for the salmon caught in the bay. The total catch for 1887 was 1,021,400lbs., distributed as follows:

	Pounds.
Restigouche county.....	271,700
Gloucester county.....	386,000
Bonaventure county.....	203,700
Gaspé county to Ship Head.....	110,000
Add for anglers' catch.....	50,000
Total.....	1,021,400

The entire amount taken in New Brunswick for the same year exceeded the yield of the bay of Chaleur by only 333,600lbs. Nova Scotia and Labrador combined furnished less salmon than the bay of Chaleur. The quantity taken on the north shore of the bay was much smaller than on the south shore, owing, says Mr. Mowat, to the following causes: (1) It has fewer netting stations by about sixty, (2) Quebec netters dare not use traps or pache nets such as are used in New Brunswick, (3) the Quebec netter pays a license of 40cts. per 200lbs. of fish caught, while the New Brunswicker pays 3cts. per fathom of net used. Reliable returns under such circumstances cannot be obtained.

The catch of salmon in Quebec showed an increase of 142,000lbs. The angling scores were small, but the supply of salmon was fair. There was an increase of salmon in New Brunswick of 88,000lbs.

The fishery products of the bay of Chaleur are valued as follows:

Restigouche and Gloucester counties.....	\$792,628
Bonaventure and Port of Gaspé.....	590,000
Expenses of 200 anglers.....	50,000
	\$1,441,628

nearly equalling British Columbia and Quebec, above Ontario, and more than Prince Edward's Island and Manitoba combined. Of the above amount, the salmon yields only about \$90,000 or \$100,000, the cod fishing being the most important, supplemented by the waning lobster industry. A brief historical sketch of the early methods of fishing, the disposition of the catch and the laws governing the fishermen follows. Mr. Mowat recommends the abolition of fixed nets and pickets and the use of gill nets with certain restrictions as to the size of the mesh and the observance of a weekly close time.

*Chaleur Bay and its Products for 1887-'88, with Net and Rod. By John Mowat.

EXPLORATIONS IN GULF OF MEXICO.

THE U. S. Fish Commission schooner Grampus left Key West Feb. 14 to investigate the off-shore grounds in the region between the Tortugas and Cape San Blas, to determine as far as practicable the extent of the banks and the abundance of fish and other animals inhabiting them. Dredgings were made at intervals of ten miles and temperature observations recorded. During the day the small surface net was towed and collected various species of small fish and many crustacea. Flying fish were abundant, also small schools of skipjacks. Two large turtles were seen at the surface. Mr. Conley struck one of them with a harpoon, but the iron did not penetrate. A Portuguese man-of-war was secured.

Feb. 15, between 1 and 2 P. M., while dredging, three red snappers were caught in quick succession; other lines were put out but only one more fish was taken, as the vessel drifted on to soft bottom. The average length of the specimens was 26in.; average weight 13lbs. The stomachs contained one eel-like fish and several small shrimp. One of the fish contained pretty well developed roe. The location of the fishing is north lat. 25° to 25° 01' west long. 82° 32' to 82° 40'.

Feb. 16, in north lat. 26° 01', west long. 82° 52', while drifting with the dredge out, red snappers were struck. Five lines were immediately put over, and before they reached the bottom every one had a fish on, and some hauled in pairs. The fish continued to bite very greedily for about fifteen minutes, during which time 31 red snappers and 3 groupers were landed on deck. Fishing was stopped because no more were needed. It seemed as if a vessel might have caught a full fare in that place. The average weight of the red snappers was 10lbs.; average length, 24in. The groupers averaged 16lbs.

Feb. 18, Mr. Conley harpooned a spotted porpoise, which was hauled on deck and a skeleton preserved.

Feb. 19, in north lat. 25° 15', west long. 82° 39' 15", the Grampus "struck" fish, and they appeared to be plentiful for a few minutes; 15 groupers and 3 red snappers were caught. A number of groupers were seen alongside, nearly at the surface. A school of redfish was seen breaking water about a quarter of a mile distant. During the afternoon a large shark and a turtle were seen at the surface near by. Fishermen claim that the presence of turtles indicates good fishing grounds, but the officers of the Grampus cannot agree with them.

The present systematic study of the Gulf is the outgrowth of the preliminary examination by the Albatross in March, 1885, which indicates possibilities of such importance as to lead Capt. J. W. Collins to mention them in the following terms:

"The investigations that were made after leaving Tampa may fairly be considered as probably the most important work done on the cruise in the direction of making researches on the fishing grounds. The region lying between Tampa and the Tortugas, outside of depth of 20 fathoms, has never been resorted to by fishing smacks, and it is certainly questionable if any one knew that red snappers could be taken on the ground we went over. That they are more generally distributed here, in depths of 26 to 27 fathoms, and far more abundant than on the grounds visited by the snapper fishermen of Pensacola, seems clearly established by the result of the researches made.

"In view of the growing demand for red snapper, and the fact that the fish on the old grounds are believed to be more or less depleted and becoming scarcer every year, the importance of this discovery, if it may so be termed, can scarcely be overestimated, since it opens up an additional field of broad proportions that there is good reason to suppose will be profitably worked in the future. Its nearness to Tampa, which has the advantages of an excellent harbor and railroad communication, are features that should not be overlooked, for if the distance from Pensacola is too great to run fish there they can be shipped from the nearer port."

Influenced by this report the schooner Wataeska of Chatham, Mass., in the latter part of 1888, fished forty miles southwest from Egmont Key in the region discovered by the Albatross. The crew of six men averaged about 9,000lbs. of red snappers per week in this locality. The grounds reported by the Grampus are new and within easy reach of railroad communication from Charlotte Harbor.

Feb. 20, in north lat. 25° 23', west long. 82° 43', several bonito were caught on troll lines.

Feb. 27, north lat. 25° 24' 30", west long. 83° 06', flying fish were numerous. A school of porpoises was sighted. One bonito was caught.

March 1, north lat. 25° 34', west long. 83° 28', two groupers were hauled to the surface. A few flying fish were frequently observed during the day. Two large schools of porpoises were seen.

March 4, at 10 A. M. in Charlotte Harbor, the seine boat joined the Grampus. Dr. Henshall reports a pleasant cruise, and all hands well. The Doctor has made a very large collection of fishes.

March 5, Mr. Hahn took the seine boat to Punta Gorda to supply her with provisions from the Fish Hawk for another cruise of three weeks.

FOREIGN ZOOLOGICAL STATIONS.—Danish Biological Station.—In the estimates for 1889-'90 is an item of \$11,502 for the establishment and support of a biological station, which is to be modeled after the "movable station" known for the last few years in Scotland. The cost of the building is calculated at \$9,180. Netherlands Zoological Station.—The Netherlands Zoological Society has determined to begin, during the coming spring, a building for a permanent zoological station in Nieuwediep, the most important fishing port of Holland. The structure will cost about \$8,750. The lower story will contain the aquaria, laboratory and library; the upper the director's living rooms. The post of director is, with the consent of the Government, conferred upon its adviser in fishery matters, Dr. P. P. C. Hoek, who is, also, the first secretary of the Zoological Society. Dr. Hoek will go to Nieuwediep about Easter. It is hoped that the laboratory will be open in the latter part of the summer.

MICHIGAN FISH COMMISSION.—Mr. John H. Bissell has retired from the Commission at the expiration of his term, and Mr. Hoyt Post, of Detroit, has been appointed in his place. The president of the Commission now is Mr. Herschel Whitaker, of Detroit. An unusually large number of brook trout is being planted this spring, and the distribution is made with the new car, to the great satisfaction of the Commissioners and the parties who receive the fish. The Commissioners believe the purchase of this car to have been one of the best investments they have made.

STUDY OF HERRING MIGRATIONS.—Filip Trybom, who is well-known to Americans, is now the first fishery assistant of the Swedish Government, and is engaged in studying the migrations and spawning habits of the Kattegat herring.—*Deutscher Fischerei-Verein.*

LAFAYETTE, Ind., July 24, 1888.—United States Cartridge Co., Lowell, Mass.: DEAR SIRS—I find your Climax paper shot shells excellent and quite equal to Eley's. There is no hang fire or tendency to do so. I intend using your shells in a match next week. I will give them a good boom, as they deserve it.

Yours truly,
—Adv. (Signed) W. GRAHAM, Champion English Shot.