



**AN ROINN TALMHAIOCHTA AGUS IASCAIGH**  
**(Department of Agriculture and Fisheries)**

**FISHERY LEAFLET No.38.**

**EXPORT AND IMPORT OF SHELLFISH**  
**1961 - 1970.**

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**DUBLIN**  
**1972.**

Export and import of Shellfish 1961 to 1970.

Introduction. The greater part of all varieties of shellfish and shellfish preparations, produced from Irish fisheries are exported. Markets for this production are located chiefly in Britain and Europe. The home market has been taking a steady proportion of some varieties, notably, lobsters, Dublin Bay prawns (Nephrops) crabs, oysters and escallops. At the same time, considerable quantities of shellfish are imported. Table 1 contrasts the total export import situation which existed from 1961 to 1970.

Table 1. Shellfish exports from, and imports into Ireland, 1961 to 1970.

EXPORTS			IMPORTS	
Year	Quantity(Tons)	Value(£)	Quantity(Tons)	Value(£)
1961	2971.6	422,200	150.4	45,136
1962	3174.4	479,800	183.0	64,038
1963	2858.5	475,500	225.9	71,439
1964	3243.6	589,500	195.5	90,157
1965	3202.1	640,900	232.6	151,661
1966	3673.5	815,200	171.2	123,383
1967	3657.9	731,600	227.7	104,560
1968	4992.9	1,016,000	417.6	180,854
1969	4844.8	1,260,800	549.2	243,947
1970	5598.2	1,594,100	412.2	251,036
Totals	38,217.5	8,025,600	2765.3	1,326,213
Average	3,821.8	802,560	276.5	132,621

### IMPORTS

Imports during the decade fluctuated somewhat in both quantity and value reaching a peak in 1969 when over 549 tons, valued at £243,947 were recorded. Imported shellfish are mainly scallop and queens, which after being processed, are re-exported. However small quantities of shellfish in the gourmet category, consisting of speciality items either in the frozen, processed, tinned or otherwise packaged state are also imported.

### EXPORTS

Since 1961 the annual quantities of shellfish exported had almost doubled by 1970 and in the same period, the value had practically quadrupled. There was only one year (1967) in the decade in which the quantity and value did not increase on that of the previous years. Generally throughout the period the quantities and values both rose steadily. For example, the increase in value in 1970 over 1969 was almost 27%.

During the decade, 38,217 tons of shellfish of all kinds were exported, having a gross value of £8,025,600 i.e. about an average of £210 per ton, ranging from approximately £142 per ton in 1961 to £285 per ton in 1970 (See Appendix 1). For 1970 the value of the two main kinds of marine fisheries exports from Ireland were as follows:-

	Quantity(tons)	Value (£)	Value per ton (£)
Totals for seafish	29,386	1,641,509	56
Totals for shellfish	5,598	1,594,100	284

The balance between exports and imports has remained favourable to the former. The majority of imported shellfish are used by Irish processors, who re-export them in packaged form.

Exports of shellfish, by variety. The categories of shellfish and shellfish preparations listed in the export statistics published by the Department of Agriculture and Fisheries are as follows:-

Exports: (i) Shellfish and shellfish preparations in airtight containers.

(ii) Shellfish fresh or frozen.

Shellfish and shellfish preparations in airtight containers vary in type very much from time to time. Earlier in the period from 1961 to 1966, they included a greater proportion of high value items, whereas from 1967 onwards the lower value items dominated.

Shellfish, fresh or frozen, include both live and frozen species i.e. crawfish, lobsters, Dublin Bay prawns, periwinkles, escallops, mussels, oysters and "others", which include whelks, cockles, clams and "queens" chiefly. The exports of shellfish by species and total shellfish preparations from 1961 to 1970 are indicated in Table 2, A and B. The growth in quantity has been rapid, reaching some 5598.2 tons at the end of the period. Correspondingly, the value of these exports has also increased from £422,200 in 1961 to £1,594,100 by 1970.

(i) Shellfish preparations in airtight containers change in variety from year to year and therefore their value per ton has not increased by as much as might be expected (Table 2B and Table 3). It was £272 per ton in 1961 and £424 per ton in 1970, but in 1966 it had reached a peak of £988 per ton, when its content consisted of more luxury items and fewer lowpriced ones (Table 3). Mussels and crab now provide most of the exports of shellfish in airtight containers. Fisheries for both these

species are under active development at present and so it seems likely that this form of export will steadily increase in future.

(ii) The most valuable aspect of our shellfish exports consists of the fresh (live) and frozen trade (Table 2A). Under the heading of "others" in the statistics a number of species, which, individually were not sufficiently abundant to be dealt with separately have been grouped together. These include whelks, cockles, clams and queens and their quantity and value are given in Table 2A. During the decade, both the quantity and the value increased from 81 tons valued at £14,800 to 400 tons valued at £110,000. Over the same period the value per ton increased from £183 in 1961 to £227 per ton in 1970 (Table 3). The remaining species can be dealt with separately under two main headings:

- (a) Crustacea and
- (b) Molluses.

#### CRUSTACEA

##### Crawfish

There is an extremely restricted home market for crawfish so that almost 100% of the landings are exported, mainly to France. The peak for the period was in 1965 when almost 150 tons were exported. (Table 2A). From 1962 to 1964 the quantities exported remained fairly steady at about 80 tons per annum, and after the peak year of 1965, remained high so that in 1970 they stood at 145 tons (Table 2A). As in most other cases, the value of exports increased during the decade, from £73,000 in 1961 to £233,000 in 1970 and from 1965 onwards remained above £100,000 per year (Table 2A). The value per ton increased from less than £568 in 1961 to £1,616 in 1970 (Table 3), making crawfish the highest priced export. There is no separate and distinct crawfish fishery. In practically all instances crawfish are caught with the

same fishing gear used mainly for lobster fishing and occasionally for crab fishing. For this reason, crawfish are a by-catch and this explains, in part, the fluctuations in the yield and the relatively low rate of exploitation.

#### Lobster

Approximately 85% of the lobster catch is exported, mainly to the Continent of Europe and in particular to France. The majority of lobsters are exported alive, although in recent years, there has been development in the canning of large and maimed lobsters whose live value is poor. The data in Table 2A refers to live animals. Exports rose from 135 tons in 1961 and reached a peak in 1966 (263 tons). Thereafter exports remained high, amounting to 229 tons in 1970. Lobsters are the most valuable of the shellfish exported and reached a peak at £333,900 in 1969, otherwise improving from £90,000 in 1961 to £310,000 in 1970 (Table 2A). Over the period, the value of exported lobsters improved from £663 in 1961 to £1,355 per ton in 1970 (Table 3).

#### Dublin Bay Prawn (Nephrops)

This species is the only one amongst Irish shellfish which is caught by trawling. These prawns have a considerable home market, either as whole prawn or as frozen tail meat. The demand for Nephrops in Britain and the mainland of Europe is high, and the market is extensive and buoyant. During the early part of the decade, the main fishing grounds were confined to the Irish Sea area. However, in 1963 and again from 1968 to 1970, other fishing grounds were opened, particularly on the south east, south and south west coasts. Exports fluctuated considerably, being low from 1965 to 1967 (Table 2A). In 1961 about 80 tons were exported, but this figure had risen to a peak of 282 tons by 1970 (Table 2A). Correspondingly, value rose from £56,600 in 1961 to £227,700 in 1970, a striking increase. Over the

period the value per ton rose from £709 in 1961 to a peak of £1,360 in 1969 although it had fallen back to £809, per ton in 1970 (Table 3). The exported value per ton of Nephrops is complicated because the proportions of whole prawn, prawn tail or tail meat making up the total weight of exports, can change from year to year. In a year in which tail meat dominates, the value per ton will exceed that for a year in which even as much as 10% of the exports consist of prawn tails (complete with shell), or whole frozen prawns.

The export of processed shellfish in airtight containers is given in Table 2B, and reflects the growth of this side of the industry. A considerable part of the high export figure of 1961 (150 tons, Table 2B) would have consisted of escallops and Dublin Bay Prawns. From 1962 onwards the increase in the exports of processed shellfish has been marked, reaching a peak of 707 tons valued at £295,000 in 1970 (Table 2B). From 1967 to 1970 the greater part of these exports consisted of processed mussels, escallops, queens and crabs. In the years from 1964 to 1966, the value of processed shellfish varied from £695 (1965) to £979 (1966) per ton (Table 3). During these years much of the shellfish used for processing consisted of high value items, particularly Dublin Bay Prawns. The lower values per ton from 1967 to 1970 have been caused by the increase in the quantities of queens and mussels which have been processed.

#### MOLLUSCS

##### Periwinkle

Amongst the molluscs, the periwinkle has been one of the mainstays of shellfish production in Ireland over the last 50 years and more. This animal is gathered by hand picking on the lower regions of the littoral zone of rocky foreshores, particularly during spring tides. The work is hard, especially in severe weather conditions, and it is, therefore, understandable that new recruits to this kind of fishing are not easily found.

The quantity of periwinkles consumed in Ireland is extremely small and, therefore, the landed figures for this species are approximately equal to the export figures (Table 2A). The quantity of periwinkles picked per annum has varied from 1879 (1970) to 2483 (1966) tons. In view of these fluctuations it is difficult to see whether there is a marked upward or downward trend in the exports. During the decade, there were small yields in 1963 and 1970. The 1963 yield was followed by three years of rising production, reaching a peak for the period in 1966, and, thereafter, gradually falling until the second sharp decline in 1970. It will be of interest to follow the yield during the next decade, and see whether this species is or is not subject to cycles of approximately five or six years interval. Clearly, however, the export value has steadily improved from £54 per ton in 1961 to a peak of £80 per ton in 1970 (Table 3).

#### Escallops

Escallop fishing around Ireland has been of varied intensity over a long period of years. The chief fisheries were mainly located in 1961 in the large inlets or bays of the south west and west coast, where they have been fished usually from small inshore craft, often using manual hauling gear. By the end of the decade a greater interest in fishing for this species had developed and late in 1970, the queen escallop fishery in the open sea off the east coast of Ireland had commenced. Thus the peak landings of 369 tons of escallops shown in Table 2A for 1970, coincided with the development of the new fishery for the closely related, "queen" or queen scallop. The escallop stocks of the bays on the west coast suffered heavy mortalities during the severe cold winter of 1962/63. This led to a sharp decline in yield especially in the years from 1965 to 1967. Thereafter with the introduction of the new escallop fisheries, exports recovered and reached their peak for the decade in 1970. The export value of escallops increased from £21,300 in



1961, to £160,500 by 1970 (Table 2A). The value per ton did not rise steadily over the period; it was £426 in 1961, falling to less than £282 in 1965, reached a peak of £655 in 1969 and finished at £435 per ton in 1970 (Table 3). The scallop found in Irish waters has a number of closely related varieties found in many parts of the world particularly off Australia and the USA. During the mid 60's large quantities of scallops were exported from Australia to Europe and these competed in price with Irish scallops. Furthermore, by 1970 the queen scallop had become an appreciable part of the catch. These are less valuable than the scallop, which would explain the lowered value in 1970.

### Oyster

In relation to total catch, more oysters are consumed on the home market than any other molluscan shellfish. The greatest number of oysters caught come from the public fisheries at Tralee Bay, Co. Kerry, and Clarinbridge, Co. Galway in that order. In recent years, private oyster farms, which have been increasing in number and output, have contributed a growing share of the total production. The heavy mortality which occurred in the scallop fisheries of the west coast during the severe winter of 1962/63, fortunately did not affect the oysters stocks. Had this happened, the total collapse of the Irish oyster industry would have followed, because oyster stocks are particularly vulnerable and it has been the experience in the rest of Europe that in places where stock numbers have diminished for various reasons, usually overfishing, the fisheries have not recovered. Continued oyster production in Holland and France for example, has been entirely dependant upon farming for a long time. In Ireland, farming of oyster is rapidly increasing. The natural stock of oysters in Tralee Bay spawned and reproduced itself successfully throughout the decade until 1970 when there was the first recorded spawning failure in the area since 1959.

Exports of oysters show considerable fluctuations (Table 2A). These fluctuations are in part due to the home market demand. The landing figures for the period showed a steady increase from 1.4 million oysters in 1961 to 2.5 million in 1969. However, in 1970 there was a sharp fall to 1.6 million. Exports increased steadily from 1962 (139 tons) to 1969 (174 tons) falling back in 1970 (103 tons) (Table 2A). Similarly, the value of the oyster exports increased steadily from 1961 (£27,000) to 1969 (£85,300) dropping back in 1970 to £53,400 (Table 2A). Over the decade, the value per ton of oysters increased from approximately £195 in 1961 to £520 by 1970 (Table 3).

#### Mussel

Mussels are widely distributed around the Irish coast line. They are ideal for farming and much improved by the use of simple cultivation techniques. In the early part of the decade supplies of mussels came from Cromane, Co. Kerry and the estuary of the River Boyne. However by 1967, new mussel fisheries at various places had been developed, particularly in Wexford Harbour and Carlingford Lough. As a result of these developments exports of mussels since 1966 have shown a healthy upward trend (Table 2A). In 1961, 283 tons (£13,600) were exported, and for the next four years, the quantity remained low and the value decreased annually. A slight recovery in 1966 and 1967 was followed by three good years so that by 1970 1,496 tons of mussels (valued at £54,100) were exported (Table 2A). Mussels are exported both alive in the shell, and as cooked, de-shelled meats in a preservative solution in airtight containers. Thus the data in Table 2A relate to whole mussels only, and part of the data in Table 2B includes processed mussels. The export price per ton (Table 3) for the years 1961 and 1962, being £48, and £60 respectively, were the highest for the decade, but they probably include the processed as well as live mussels. From

1963 to 1970 the value of live mussel exports has only increased from about £28 to £36 per ton (Table 3). The high cost of transport has depressed the value of mussels and the curtailed progressive increase in export prices.

### CONCLUSIONS

The weight of shellfish exported in 1961 increased by 1970, from 2,822 to 4892 tons (Table 2A). Of this, shellfish in various processed forms formed about 13%. The main development has taken place in the export of live whole shellfish. In this regard, certainly up to 1970, the major advances were made particularly by crawfish, lobsters, Dublin Bay Prawns, escallops, mussels and oysters. The value of the exported shellfish in all forms reached almost 1.6 million pounds sterling by 1970, which represents almost a fourfold increase over 1961. Having regard to the corresponding value of sterling between 1961 and 1970, the real increase in the value of exports is probably twofold, somewhat in keeping with the twofold weight increase already discussed.

A comparison of the contribution of each type of shellfish exported can be summarised as follows (from Appendix 2):-

	Crawfish	Lobster	Dublin Bay prawns	Periwinkle	Escallop	Mussel	Oyster	Others	Processed Shellfish
Wt. (tons) 1961-1970	2.96%	4.96%	2.36%	56.6%	2.31%	18.10%	2.10%	4.50%	5.65%
Value (£1,000) 1961-1970	15.6%	24.9%	11.5%	18.0%	4.90%	2.8%	4.10%	4.90%	13.30%

Crawfish, lobsters and Dublin Bay prawns whilst making up only 10.8% of the weight of shellfish exported over the decade, represented 52.0% of the value.

The average value per ton of each type of shellfish from 1961 to 1970 can be summarised as follows (from Table 3):-

	Crawfish	Lobster	Dublin Bay Prawns	Periwinkle	Escallop	Mussel	Oyster	Others	Processed Shellfish
Average value per ton 1961-1970	£1,096	£1,009	£838	£67	£445	£34	£414	£228	£571
Value per lb. 1961	25p.	30p.	32p.	2p.	19p.	2p.	9p.	-	12p.
Value per lb. 1970	72p.	61p.	36p.	4p.	19p.	2p.	23p.	-	26p.

+ Data for 1961 not available.

The 1970's have already opened with considerable expansion in the queen scallop, mussel and crab fisheries and this together with a steady and satisfactory export report for the period reviewed, augurs well for the next decade and illustrates the tremendous value of our strictly inshore fisheries, as earners of foreign currency. It also illustrates the ever increasing dependance of local fishing communities upon this type of fishing. In the last decade, many inshore fishermen have not pursued fisherman/farmer livelihoods, but have become solely dependant upon inshore fishing.

# APPENDIX 1.

Aggregate quantity (tons) and value (£'s) of all types of shellfish exported from 1961 to 1970

	Wt. (tons)	Value (£)	In airtight containers		Total	
			Wt. (tons)	Value (£)	Wt. (tons)	Value (£)
1961	2,821.9	381,500	149.7	40,700	2,971.6	422,200
1962	3,121.6	440,600	52.8	39,200	3,174.4	479,800
1963	2,785.1	442,100	73.4	33,400	2,858.5	475,500
1964	3,127.1	492,900	116.5	96,600	3,243.6	589,500
1965	3,094.6	566,200	107.5	74,700	3,202.1	640,900
1966	3,559.7	703,800	113.8	111,400	3,673.5	815,200
1967	3,453.7	642,200	204.2	89,400	3,657.9	731,600
1968	4,723.6	903,500	269.3	112,500	4,992.9	1,016,000
1969	4,480.4	1,089,800	364.4	171,000	4,844.8	1,260,800
1970	4,891.5	1,299,400	706.7	294,700	5,598.2	1,594,100
Total	36,059.2	6,962,000	2,158.3	1,063,600	38,217.5	8,025,600
Average	3,605.9	696,200	215.8	106,360	3,821.8	802,560

# APPENDIX 2

Total weight (tons) and value (£ 000) of shellfish exported from 1961 to 1970

	Crawfish	Lobster	Dublin Bay Prawn	Periwinkle	Escallop	Mussel	Oyster	Other	In airtight containers	Total
Wt. (Tons) 1961-1970	1,134.6	1,894.7	1,094.4	21,616.3	881.4	6,916.2	803.5	1,718.1	2,158.3	38,217.5
Value (£ 000) 1961-1970	1,252.0	2,000.4	922.6	1,442.2	396.8	222.6	330.0	395.4	1,063.6	£8,025,600

SHELLFISH EXPORTS 1961-1970

Table 2. The total annual weight in tons (000) and value (£ 000) of shellfish exported from 1961-1970. Listed types under A and processed shellfish under B.

Year	A										B	
	Crawfish	Lobster	Dublin Bay Prawn	Periwinkle	Escallop	Mussel	Oyster	Other	In airtight containers			
1961	Wt. (Tons)	128.5	135.4	79.8	2,064.6	50.0	282.7	-	80.9	149.7		
	Value (£ 000)	73.0	89.8	56.6	112.4	21.3	13.6		14.8	40.7		
1962	Wt. (Tons)	89.9	144.1	101.9	2,238.7	66.6	204.2	138.5	137.6	52.8		
	Value (£ 000)	67.7	108.2	73.1	124.9	27.4	12.3	27.0	?	39.2		
1963	Wt. (Tons)	88.2	127.9	122.9	1,879.2	63.8	382.7	60.7	59.7	73.4		
	Value (£ 000)	70.6	95.2	82.8	117.5	34.3	10.8	21.2	9.7	33.4		
1964	Wt. (Tons)	83.5	156.4	84.8	2,126.0	66.9	443.9	72.0	93.6	116.5		
	Value (£ 000)	75.7	137.4	57.2	133.0	31.8	9.5	31.6	16.7	96.6		
1965	Wt. (Tons)	149.7	176.6	60.6	2,246.6	42.2	249.2	73.9	95.8	107.5		
	Value (£ 000)	136.6	162.3	45.7	148.7	11.9	6.3	31.6	23.1	74.7		
1966	Wt. (Tons)	129.7	262.7	78.7	2,482.8	47.1	330.2	72.1	156.4	113.8		
	Value (£ 000)	145.1	249.5	55.2	162.6	15.1	9.2	32.1	35.0	111.4		
1967	Wt. (Tons)	114.1	211.7	64.7	2,251.8	44.5	615.7	39.8	111.4	204.2		
	Value (£ 000)	131.1	217.8	65.0	156.9	13.2	15.3	16.2	26.7	89.4		
1968	Wt. (Tons)	120.2	234.1	102.1	2,315.8	51.5	1,623.6	70.2	206.1	269.3		
	Value (£ 000)	169.0	296.1	99.6	173.0	29.1	49.3	31.6	55.8	112.5		
1969	Wt. (Tons)	86.3	216.8	117.4	2,141.1	79.7	1,288.1	173.5	377.5	364.4		
	Value (£ 000)	149.6	333.9	159.7	163.8	52.2	42.2	35.3	103.1	171.0		
1970	Wt. (Tons)	144.5	229.0	281.5	1,869.7	369.1	1,495.9	102.7	399.1	706.7		
	Value (£ 000)	233.6	310.2	227.7	149.4	160.5	54.1	53.4	110.5	294.7		

VALUE OF SHELLFISH EXPORTS, PER TON (£000)

Table 3. Annual value (£) per ton of types of shellfish listed in export records. Average value per ton for the period 1961 - 1970 also given.

Year	Crawfish £	Lobster £	Dublin Bay Prawn £	Periwinkle £	Escallop £	Mussel £	Oyster £	Other £	In Airtight containers £
1961	568.09	663.32	709.27	54.44	426.00	48.11	-	182.94	271.88
1962	752.06	750.87	717.37	55.79	411.41	60.24	194.81	?	742.42
1963	800.45	744.33	673.72	62.53	537.62	28.22	349.26	162.48	454.04
1964	906.59	878.52	624.53	62.56	475.34	21.40	438.89	178.42	829.18
1965	912.49	919.03	754.12	66.19	281.99	25.28	427.61	241.23	694.88
1966	1,118.74	949.75	701.40	65.49	320.59	27.86	445.22	223.79	978.91
1967	1,148.99	1,028.81	1,004.64	69.68	296.63	24.85	407.04	239.68	437.81
1968	1,405.99	1,264.84	975.51	74.70	565.05	30.37	450.14	270.74	417.75
1969	1,733.49	1,540.13	1,360.51	76.50	654.96	32.76	491.64	273.11	469.27
1970	1,616.61	1,354.58	808.88	79.91	434.84	36.17	519.96	276.87	417.01
Average	1,096.45	1,009.42	837.98	66.78	445.34	33.53	413.84	227.70	571.32