# HOVERFLY NEWSLETTER

# NUMBER 19 NOVEMBER 1994

Hoverfly Recording Scheme

Biological Records Centre

All readers will be familiar with common names for certain hoverflies, such as the Drone Fly (*Eristalis tenax*), the Narcissus Fly (*Merodon equestris*) and the Lesser Bulb Flies (*Eumerus sp.*), but I suspect that nearly all of us use the scientific names when referring to these species just as we are obliged to for the majority of species which have no common names. In **Hoverflies of Sheffield and North Derbyshire**, Derek Whiteley introduced us to a few new common names, at least one of which, the Marmalade Fly (*Episyrphus balteatus*) seems to be catching on. But who is familiar with any of the following?

The Two-spotted Forest Edge Hoverfly

The Common Gold Hoverfly

The Common Emerald Hoverfly

The Great Marsh Hoverfly

The Golden-haired Long-abdomen Hoverfly

The White-banded Peat Hoverfly

The Brilliant Hoverfly

The Shining Aphid Hoverfly

The Bumblebee Forest Hoverfly

The Red-haired Ant Hoverfly

All these are translations from the German of common names which Kurt Kormann has applied in systematic fashion to hoverflies in his book **Schwebfliegen Mitteleuropas**. All those listed above belong to species on the British list. For those who wish to work out or guess the species to which these names belong, I have listed their Latin equivalents at the end of the newsletter. Some are much more obvious than others.

I am sure that opinion will be divided as to whether the adoption of vernacular language names for species is a good idea. Of course for very popular groups, such as butterflies, they have been established for many years, and more recently common names have been introduced for some orders or families (eg dragonflies and ladybirds). Undoubtedly the availability of no names other than the scientific ones is a deterrent to some would-be hoverfly enthusiasts; equally, perhaps for some experts there is a certain "snob value" as a result of their subject not being "tainted" by "vulgar" familiar names! And, of course the scientific names are international and standard; at this point I hear some hollow laughs from readers who have had to make extensive amendments to their records as a result of the spate of recent changes in generic and specific names of hoverflies!

It would be fascinating to receive the views of readers on this matter, and include them in future editions of this newsletter. Articles on any other aspect of hoverflies are also, as always, welcome, as are readers' reactions to and comments on any item in the current newsletter. Please let me have these by 1 March 1995; the address is David Iliff, Green Willows, Station Road, Woodmancote, Cheltenham, Gloucester, GL52 4HN.

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#### **VOLUCELLA ZONARIA IN CORNWALL**

# Rod Belringer 20 Wakefield Avenue, St Budeaux, Plymouth, PL5 1PU

In Hoverfly Newsletter No. 15, Anthony Bainbridge, in his article entitled, "Volucella zonaria moves west", reported finding the species in Plymouth in 1991. His article ended with the prediction "Cornwall, here it comes ......"

During 1993, L Truscott and I visited a narrow woodland valley in Torpoint, East Cornwall, where we found this large hoverfly, usually in ones or twos per visit. On one occasion we were sure we had at least three. Bramble flowers appeared to be the main feeding sites, though we did see them on hogweed flowers a few times.

V. zonaria was also seen in two Torpoint gardens, about half a mile apart, and at nearby Cremyll, feeding on Hebe flowers in a car park flowerbed.

This year we have seen V. zonaria again in the wooded valley in Torpoint.

(Editor's comment: I note with interest that one of Rod's sightings of V. zonaria was in a car park, in view of the correspondence I had with Colin Plant over the occurrence of Volucella inanis in car parks; see Hoverfly Newsletter No. 18).

# WHO KILLED MYATHROPA?

Kenn Watt
"St Elmo" 64 Hilton Drive, Aberdeen AB2 2NP
Tel: 0224 483065

While walking home from work I pass a large Sycamore tree in the college grounds which has a rot hole in its trunk about 2.5 m above ground level, where a branch has broken off some time ago. There is a small opening which is not large enough to put one's hand inside to investigate the contents. Therefore I am used to peering up at it to see if anything has emerged. On this particular day it was raining so I was not hopeful. However I was amazed to see a large tangled mass of *Myathropa* larvae just below the opening. Thinking that they had emerged to pupate I left them and returned the following

day. They were still there. I scooped up the mass and took them back to my lab. There were over 70 larvae - all dead - with half a dozen predaceous Muscid larvae feeding on them. What had caused this catastrophe? Who or what had killed them? Why were they all intertwined? Had the rain downpour drowned them? Not likely since surely they have evolved to survive their rot hole being flooded. Had the Muscids killed them? Again not likely that the Muscids would kill all of them. Has anyone any plausible suggestions to this riddle? Answers to the editor for the next newsletter.

#### RIVER TAY REED BED SURVEY

# Kenn Watt "St Elmo" 64 Hilton Drive, Aberdeen AB2 2NP Tel: 0224 483065

As part of the Initiative for Scottish Insects, I have been contracted by Scottish Natural Heritage to survey the invertebrate fauna of the River Tay reed beds between Perth and Dundee. During May to September water traps and pitfall traps were set up at four different sites along the 12 miles of Phragmites reed beds. The traps have still to be analysed fully but initial results are encouraging, indicating a wide variety of species from this monoculture habitat.

During the month of May 1200 specimens of hoverflies were taken. Of the 32 species captured 2 were nationally Notable (Anasimyia lunulata and Platycheirus immarginatus) and one RDB1 (Sphaerophoria loewi). However, in a Scottish context, there were 4 Notable (Cheilosia vernalis, Neoascia meticulosa, Platycheirus fulviventris, Platycheirus immarginatus), 1 Status 3 (Chalcosyrphus nemorum), 1 Status 2 (Tropidia scita) and 2 Status 1 (Anasimyia lunulata, Sphaerophoria loewi). Of particular interest was the large number (101) of Tropidia scita which are most likely breeding in the reed beds.

As there is a management agreement at one of the sites between the local farmer/landowner and SNH it is hoped that the project will indicate which rare species are breeding there and possible suggestions to be made as to how best to conserve the interesting insect fauna of the reed beds.

#### **HOVERFLIES ON FENNEL**

# Stephen Palmer The Warren, Hindon Road, Dinton, Wilts, SP3 5EG

On 5 August 1994 I had the opportunity to monitor hoverflies visiting a large fennel (Foeniculum vulgare) plant in a rural garden in Wiltshire (grid ref SU 017312). The surrounding habitat consisted of mature gardens, damp deciduous woodland and a small flooded and long disused clay quarry. My attention was drawn to the fennel plant by the large numbers of Episyrphus balteatus present, the species also being seen in large numbers feeding on aphid honeydew on a nearby plum tree and other garden plants. In all, several hundred individuals must have been present. The weather throughout the day was warm, rather muggy and overcast, with occasional sunshine, but the overall lack of sun did not appear to reduce activity. The fennel was inspected approximately every half hour from 8.30 am until 6 pm (I was assisted by one son and one daughter with numerous captures), and hoverflies were identified using a binocular microscope where necessary.

I was able to check the fennel again on subsequent weekends and the following is a list of hoverfly species recorded on the plant between 5 and 21 August:

Melanostoma scalare Playtcheirus albimanus Platycheirus peltatus (ss) Platycheirus scutatus Pyrophaena granditarsa Chrysotoxum bicinctum Dasysyrphus albostriatus Epistrophe grossulariae Episyrphus balteatus Meliscaeva cinctella Meliscaeva auricollis Eupeodes corollae Eupeodes luniger Scaeva pyrastri Sphaerophoria scripta Syrphus ribesii

Syrphus vitripennis

Xanthogramma pedisequum Cheilosia bergenstammi Cheilosia pagana Cheilosa scutellata Cheilosia soror Cheilosia proxima Cheilosia vernalis Neoascia podagrica Orthonevra nobilis Orthonevra splendens Eristalis pertinax Myathropa florea Eumerus tuberculatus Neocnemodon vitripennis Pipiza noctiluca Pipizella varipes Syritta pipiens

### PIPIZELLA MACULIPENNIS IN GLOUCESTERSHIRE

# David Iliff Green Willows, Station Road, Woodmancote, Cheltenham, Glos. GL52 4HN

The scarce and elusive hoverfly *Pipizella maculipennis* was recorded from Wotton-under-edge in Gloucestershire many years ago by V R Perkins, but until this year the only recent record of this species for the country is that of Ian McLean, who found a female at the now defunct Blaisdon railway nature reserve in July 1980.

On 11 July this year I noticed a small black hoverfly feeding on hogweed flowers in Hay Wood near Dymock, Gloucestershire. Examination of this insect revealed that it was another female P. maculipennis, which was identifiable in particular by the very long third antennal segment. The specimen also had black hairs on the axis of tergites 3 and 4 (I can confirm that these hairs are, as the key in British Hoverflies states, "hard to see"!); the wings had a faint brown cloud. Nigel Wyatt of the Natural History Museum verified the identification, and the specimen has been placed in the museum's collection.

Records of this species are sparse though widely scattered in Britain. It is perhaps a classic example of a species that is easy to miss, both because it is small and black and because of its close resemblance to the two commoner species of the genus.

### XYLOTA SEGNIS ON BUTTERCUPS - NOT SO UNUSUAL, PERHAPS

# David Iliff Green Willows, Station Road, Woodmancote, Cheltenham, Glos. GL52 4HN

In British Hoverflies, Alan Stubbs quotes a report from Ian McLean of Xylota segnis on Ranunculus (buttercup) flowers, and describes this as a highly unusual occurrence. Although this species is usually found on foliage, I have found it on buttercup flowers on a number of occasions, and though I would

not describe this as a commonplace event, I have now lost count of the number of such observations I have made. This year I saw two separate specimens of X. segnis on buttercups on the same day.

The other Xylota species to favour buttercups is the much scarcer X. coeruleiventris. In the case of that species the majority of my (comparatively few) sightings have been on buttercup flowers.

### **ANNOUNCEMENTS**

# Malloch Society AGM and Annual Dinner

Perth Museum Sat. 3rd Dec. 1994 2.00 pm

# **Provisional Programme:**

Graham Rotheray

Canadian Saproxylix Hoverflies

**Andy Whittington** 

South African Diptera

Kenn Watt

Hoverflies of the R. Tay Reed Beds

Alain Maibach

To be announced

Geoff Hancock

Diptera of Trinidad

To be followed by the Annual Dinner in the Salutation Hotel at 8.00 pm when the winner of this year's DOTY AWARD (Scottish Dipterist Of The Year) will be presented. Further information from Kenn Watt - "St Elmo" 64 Hilton Drive, Aberdeen AB2 2NP (Tel. 0224-483065).

# Holiday '95

Thinking of visiting Scotland to collect flies next year? Then why not stay with your local dipterist in Grampian - Kenn Watt. "St Elmo" Bed & Breakfast - 64 Hilton Drive, Aberdeen AB2 2NP (Tel. 0224 483065). Reduced rates to visiting dipterists.

# Colour Guide to Hoverfly Larvae

Graham Rotheray's Colour Guide to Hoverfly Larvae (Dipterists Digest No. 9) is now available, and can be obtained from **Derek Whiteley**, 17 Rustlings Road, Sheffield, S11 7AA, at a price of £11.95, post free.

#### RECENT LITERATURE

Andrew, R.H. & Watt, K.R. 1993. Orkney Hoverflies (Dipt. Syrphidae). Bull. Orkney Field Club pp. 41-45 English.

Barkalov, A.V. 1993. Taxonomy and distribution of six Palaearctic *Cheilosia* species (Diptera, Syrphidae) *Entomologica Fennica* (1993) 4(4): 207-212 English.

- Bradescu, V. 1993. Orthonevra shusteri sp. nov. and two species recorded for the first time for the fauna of Romania (Diptera, Syrphidae). Travaux du Museum d'Histoire Naturelle "Grigore Antipa" (1993) 33(0): 7-10 French.
- Brunel, E., Mesquida, J., Renard, M. & Tanguy, X. 1994. Distribution of pollinating entomofauna on rapeseed (*Brassica napus* L) and turnip rape (*Brassica campestris* L) flowers: The effect of turnip rape's apetalous character. *Apidologie* (1994) 25(1): 12-20 French.
- Bruno, T.V., Guimaraes, J.H., Santos, A.M.M.D., Tucci, E.C. 1993. Synanthropic flies (Diptera) and their predators breeding in poultry manure in the State of Sao Paulo, Brazil. *Revista Brasileira de Entomologia* (1993) 37(3): 577-590 Portuguese.
- Carver, M., Hart, P.J., Wellings, P.W. 1993. Aphids (Hemiptera: Aphididae) and associated biota from the Kingdom of Tonga, with respect to biological control. *Pan-Pacific Entomologist* (1993) 69(3): 250-260 English.
- Chen, P.R., Zhang, Z.Q., Wang, K., Wang, X.Y., Xu, W.I. & Gao, Z.L. 1994. Allothrombium pulvinum Ewing (Acari, Trombidiidae), an important early-season natural enemy of Aphis gossypii Glover (Hom: Aphididae) in cotton. J. Applied Entomology (1994) 117(2): 113-121 English.
- Cheng, X. & Yang, C.K. 1993. New species and records of Milesiinae (Dipt: Syrphidae) from Guizhou, China. *Entomotaxonomia* (1993) 15(4): 327-323 Chinese.
- Cowgill, S.E., Wratten, S.D. & Southerton, N.W. 1993. The effect of weeds on the numbers of hoverfly (Dipt: Syrphidae) adults and the distribution and composition of their eggs in winter wheat. *Annals of Applied Biology (1993)* 123(3): 499-515 English.
- Gasparich, G.E., Saillard, C., Clark, E.A., Konai, N., French, F.E., Tully, J.G., Hackett, K.J. & Whitcomb, R.F. 1993. Serologic and genomic relatedness of group VIII and group XVII spiroplasmas and subdivision of Spiroplasma group VIII into subgroups *Int. J. Syst. Bacteriol.* (1993) 43(2): 338-341 English.
- Hemptinne, J.L., Dixon, A.F.G., Doucet, J.L. & Petersen, J.E. 1993. Optimal foraging by hoverflies (Dipt: Syrphidae) and ladybirds (Coleoptera: Coccinellidae): Mechanisms. *European J. Entomology* (1993) 90(4): 451-455 English.
- Hurkmans, W. 1993. A monograph of Merodon (Dipt: Syrphidae). Part 1. Tijdschrift voor Entomologie (1993) 136(2): 147-234 English.
- Jentzsch, M. 1993. Faunistic notes: 469. On the presence of *Pipiza austriaca* Meigen in Germany (Dipt: Syrphidae). *Entomologische Nachrichten und Berichte* (1993) 37(1): 54-56 German.
- Kassebeer, C.F. 1993. The hoverflies (Dipt: Syrphidae) from Lopautal near Amelinghausen. *Drosera* (1993) 93(1-2): 81-100 German.
- Kralikova, A. 1993. Hoverflies (Dipt: Syrphidae) the area of the Danube water works construction site. *Biologia (Bratislava) (1993)* 48(5): 541-548 English.
- Lagrange, E. 1993. Two new species of the genus *Dolichogyna* (Dipt: Syrphidae). *Neotropica (La Plata)* (1992(1993)) 38(100): 119-126 Spanish.

Listabarth, C. 1993. Pollination in Geonoma macrostachys and three congeners, G. acaulis, G. gracilis, and G. interrupta. Botanica Acta (1993) 106(6): 496-506 English.

Lunau, K. 1993. Interspecific diversity and uniformity of flower colour patterns as cues for learned discrimination and innate detection of flowers. *Experientia* (1993) **49**(11): 1002-1010 English.

MacGowan, I. 1993. The entomological value of Aspen in the Scottish Highlands. *Malloch Society Report* English.

MacGowan, I. 1994. Additions to the list of Diptera from the Western Isles. Dipterist Digest (1994) No 14: 28-31 English.

MacGowan, I. 1994. Creating breeding sites for Callicera rufa Schummel (Dipt: Syrphidae) and a further host tree. Dipterist Digest (1994) 1(1): 6-8 English.

MacGowan, I. & Watt, K.R. 1994. A further record of *Parasyrphus nigritarsis* (Zetterstedt), 1843) (Dipt: syrphidae) with a review of its known distribution in Britain. *Dipterist Digest* (1994) 1(1): 26-29 English.

Maibach, A. & Goeldin-De-Tiefenau, P. 1993. Description and key of determination of some immature stages of the genus *Neoascia* Williston belonging to the West Palaearctic region (Diptera, Syrphidae). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft (1993)* 66(3-4): 337-357 French.

Mani, M. 1993. Evaluation of toxicity of different pesticides to the green lacewing. *Mallada boninensis* (Chrysopidae: Neuroptera). J. Biological Control (1993) 7(2): 61-68 English.

Mensah, R.K. & Madden, J.L. 1993. Life history and biology of *Ctenarytaina thysanura* Ferris and Klyver (Hemiptera: Psyllidae) on *Boronia megastigma* Nees ex Bartl. (Rutaceae) in Tasmania. *J. Australian Entomological Society* (1993) 32(4): 327-337 English.

Moyle, J.L. & Jepson, P.C. 1993. Short-term risk predictions for *Episyrphys balteatus* (Dipt: Syrphidae) larvae exposed to pyrethroids on winter wheat. *Science of the Total Environment* (1993) 0(Suppl. Part 1): 791-797 English.

Petanidou, T. & Ellis, W.N. 1993. Pollinating fauna of a phryganic ecosystem: Composition and diversity *Biodivers. Lett.* (1993) 1(1): 9-22 English.

Rotheray, G.E. 1993. Insects from shingle banks and riverside habitats from Strathspey. *Malloch Society Report* English.

Resendiz Ruiz, M.E. 1993. A new predator on the whitefly. Southwest. Entomol. (1993) 18(2): 147-148 English.

**Skidmore**, P. 1994. Composite list of diptera collected in South Uist, Benbecula and North Uist, 1989. *Dipterist Digest (1994) No. 14: 44-52* English.

Stubbs, A.E. 1994. Sphegina (Asiosphegina) siberica Stackleberg, 1953, a new species and subgenus of hoverfly (Dipt: Syrphidae) in Britain. Dipterist Digest (1994) 1(1): 23-25 English.

Vockeroth, J.R. 1994. Information of types of Syrphidae Dipterist Digest (1994) 1(1): 29-30 English.

Warncke, E., Terndrup, U., Michelsen, V. & Erhardt, A. 1993. Flower visitors to Saxifraga hirculus in Switzerland and Denmark, a comparative study. Botanica Helvetica (1993) 103(2): 141-147 English.

Whiteley, D. (ed) 1994. A survey of Diptera on the Isle of Rum - 1990. Dipterist Digest (1994) No. 14: 2-27 English.

Whiteley, D., Garland, S.P. & Hancock, E.G. 1994. A survey of Diptera on South Uist and adjacent Outer Hebridean Islands. Dipterist Digest (1994) No. 14: 32-43 English.

Winder, L., Hirst, D.J., Carter, N., Wratten, S.D. & Sopp, P.I. 1994. Estimating predation of the grain aphid Sitobion avenue by polyphagous predators. J. Applied Ecology (1994) 31(1): 1-12 English.

### K. KORMANN'S HOVERFLY NAMES

(see Page 1)

The Two-spotted Forest Edge Hoverfly Pipiza noctiluca Ferdinandea cuprea The Common Gold Hoverfly Chrysogaster solstitialis\* The Common Emerald Hoverfly Helophilus trivittatus The Great Marsh Hoverfly The Golden-haired Long-abdomen Hoverfly Xylota sylvarum The White-banded Peat Hoverfly Sericomyia lappona The Brilliant Hoverfly Callicera aenea Parasyrphus annulatus\* The Shining Aphid Hoverfly Volucella bombylans The Bumblebee Forest Hoverfly Microdon mutabilis The Red-haired Ant Hoverfly

<sup>\*</sup> did anyone correctly identify either of these?

# **V**

# **Hoverfly Recording Scheme**

# **Progress report**

There has not been much activity in 1994 because Roger Morris started a new job (English Nature's County Officer for Humberside) and Stuart Ball has been heavily committed to work on a new version of Recorder (3.2 - now available!). Never the less the number of records on computer file has continued to grow and now totals 213,816 records from 2,109 10km squares (2,040 in England, Scotland and Wales and 69 in Ireland). Table I shows the sources from which records have been received and the way in which the database has grown. The breakdown of sources (at the end of the table) shows that c.54,500 were received from BRC (these have now been checked against the original cards), c.77,000 have been received in machine readable form from other databases and c.82,000 records have been entered from paper sources - mostly from BRC cards by Roger Morris.

The usual coverage maps show the squares for which there are records in Britain and the number of species recorded from each square.

Table II shows the numbers of records on the database from each decade. It shows that 80% of records date from the 1980s and 1990s. This is good in that these "modern" records are the most significant for conservation use and also for analysis against recent land cover and other data, but suggests that we are not in a position to judge range changes compared with the past. One of the future activities of the scheme will be to trawl older records from museum collections and the literature to improve the historical picture.

Stuart Ball 10 November, 1994

Table I Growth of the database showing the sources of records and the dates they were added to the database.

Date	nRecs	Source
23/9/91	54,503	BRC (disk - ASCII)
23/10/91	9,467	RKM Surrey Scheme (Recorder)
23/10/91	5,680	ISR (disk - Arev)
23/10/91	4,436	WPIS (disk - Arev)
23/10/91	1,508	EAFIS (disk - Arev)
23/10/91	340	Dungeness (disk - Arev)
23/10/91	3,432	Dipterists fld mtgs (Recorder)
4/2/92	1,307	From cards by RKM
5/2/92	431	Mike Pugh (disk - dBase)
6/2/92	10,997	Darwin Sumner (disk - dBase)
14/2/92	2,707	SGB (Apple IIe BRP)
15/2/92	100	SGB - Hoy (Apple IIe BRP)
24/2/92	2,567	From cards by RKM
10/3/92	4,482	From cards by RKM
19/3/92	2,990	From cards by RKM
30/3/92	7,950	From cards by RKM
7/4/92	397	M.C.Brian (disk - ASCII)
7/4/92	1,914	From cards by RKM
11/8/92	1,090	Dipterists Stirling (Recorder)
13/8/92	3,535	Adrian Fowles (disk - WP 5.1)
14/10/92	2,183	ISR Lists (disk - Arev)
27/10/92	10,184	From cards by RKM
27/10/92	40	P.Holmes Border mires report
9/11/92	2,413	From cards by RKM
21/11/92	463	From cards by RKM
11/1/93	446	I.Perry (RA33s by SGB)
11/1/93	2,335	From cards by RKM
14/1/93	135	SGB's own records
1/4/93	881	M.C.Brian (disk - ASCII)
24/4/93	110	SGB's own records
25/4/93	22,605	From cards by RKM
30/4/93	103	White(1947) Lincs Diptera
18/5/93	58	E.Thorpe New Mills lists
24/5/93	8,419	Keith Porter (disk-dBase)

2/7/93	8,310	RKM Surrey Scheme (Recorder)	
2/7/93	260	From cards by RKM	
6/12/93	7,016	From cards by RKM	
12/12/93	2,084	From cards by RKM	
19/12/93	1,340	From cards by RKM	
29/12/93	3,412	From cards by RKM	
21/1/94	1,070	From cards by RKM	
21/1/94	1,641	RKM Surrey Scheme (Recorder)	
29/1/94	359	From cards by RKM	
2/2/94	2,194	CBRU (disk - ASCII)	
3/2/94	5,847	AES (Recorder)	
4/2/94	22	Additional Stirling Records	
13/2/94	5	Joss Pain (RA33 by SGB)	
23/2/94	2,279	From cards by RKM	
26/2/94	1,497	Dipterists Norfolk (Recorder)	
27/2/94	1,480	From cards by RKM	
27/2/94	145	Mike & Liz Howe (RA33s by SGB)	
18/9/94	3	Ken Merrifield (disk - Lotus)	
18/9/94	54	SGB's own records	
18/9/94	259	M.C.Brian (disk - ASCII)	
18/9/94	732	From cards by RKM	
18/9/94	232	I.K.Morgan (RA33s by SGB)	
8/11/94	86	D.Telfer (RA33s by SGB)	
8/11/94	168	P.Beuk (disk - dBase)	
8/11/94	1,715	RKM Surrey scheme (Recorder)	
8/11/94	281	Flies in Yorks Museum	
9/11/94	1,117	Brian Wetton (RA33s by SGB)	
Total	213,816		
	54,503	Received from BRC	
	77,259	Received on disk	
	82,054	Entered from cards and other	
		paper sources	

 $\textbf{Table II} \quad \textbf{Number and percentage of records on the database for each decade.}$ 

Date	Records	%
undated	1,460	0.68
19th century	45	0.002
1900-1909	936	0.44
1910-1919	482	0.23
1920-1929	2,442	1.14
1930-1939	3,189	1.49
1940-1949	3,143	1.56
1950-1959	2,726	1.27
1960-1969	7,238	3.39
1970-1979	19,981	9.34
1980-1989	126,324	59.08
1990-1994	45,850	21.44
Total	213,816	













