

The Influence of Oöphorectomy on the Performance of Greyhound Bitches.

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GREYHOUND racing is a form of sport new to this country. It was started only seven years ago in Johannesburg. A number of dogs of both sexes were introduced from England and Ireland and ran on the only racing track in the country at that time. The sport developed rapidly under the direction of the African Greyhound Racing Association. It became so popular that a second club was soon formed, also in Johannesburg. The Manager of the latter club, The Union Greyhound Racing Association, Major Budd, began breeding greyhounds on a large scale. He had long been associated with greyhound racing and breeding in England before coming to South Africa. A number of well bred young bitches were purchased in England, and after having competed in races for a short time these were put to stud to form a nucleus for the breeding kennels. When the saplings were growing the Manager discussed the problem of the females with us. The rules of the club prohibited bitches from racing for 3 months after they had shown "heat". This meant that they could be used only for 6 months in the year. The Manager considered this enforced biannual rest of the females uneconomic and the operation of oöphorectomy was suggested. Major Budd assured us that the operation had not been tried in England on racing bitches and so far as he was aware oöphorectomised bitches had not raced in England. As a number of bitches of suitable ages were available at the kennels of the Union Greyhound Racing Association it was decided to operate on some of them at once. In selecting females for operation it was decided to pick them from litters where litter sisters could be left unoperated upon for later comparison. The selection was done entirely by Major Budd. He selected the least promising bitches for operation as it was intended to breed from the others when they were retired from the race track. The age at which the operation was performed was between six and twelve months. The total number operated upon was thirty-six. Unfortunately there was an acute outbreak of distemper in the kennels during 1938 and only a few of the bitches survived. Several of those operated upon later are only now reaching maturity. However, the number that have reached racing age is considered sufficient to warrant a preliminary publication.

THE OPERATION.

The bitch is prepared by starving for 12 to 18 hours. During this period the ventral surface of the abdomen is shaved from the xyphoid cartilage to the pubis. It is afterwards painted with tincture of iodine. An hour prior to operation eukodal, 1 c.c. per 5 to 6 Kilos body weight, is given subcutaneously. Anaesthesia is completed with pernocton, approximately 0·2 to 0·3 c.c. per Kilo body-weight, given intravenously through the dorsal metatarsal vein just prior to operation.

The pernocton is given slowly, about 1 c.c. per minute. If care is taken in the rate of administration, the animal just reaches deep anaesthesia as the recommended dose is completed, and any undesirable effects the anaesthetic itself may have are eliminated. The patient is placed in the dorsal position with the head slightly lower than the body. The site of the operation is cleaned with aether, followed by tincture of iodine. The whole body is covered by sterile cloths through which an elliptical window has been made. The incision is made along the middle line, beginning half an inch in front of the umbilical cicatrix and extending about 1½ inches behind it. If the tissues are severed along the linea alba there is little haemorrhage. When the peritoneum is reached it is picked up in a forceps and severed throughout the entire length of the wound with a straight blunt pointed scissors. Sterile gauze cloths are now fixed around the abdominal opening. The posterior extremity of the patient is raised from the table so that the intestines move forward, thereby allowing a clear view of the posterior abdominal cavity. The wound is dilated and by using a forehead lamp the uterus is easily seen running forward and outwards along the dorso-lateral surface of the abdomen. Both horns are picked up in slender forceps and the right withdrawn. Two catgut ligatures are tied on the ovarian ligament which is held in an artery forceps. The fallopian tube is then sectioned after which the ovary is removed with blunt pointed scissors. Before releasing the ovarian ligament the stump is carefully observed for haemorrhage. The left ovary and tube are now treated in a similar manner. The ovarian ligament in the greyhound bitch is exceedingly short, especially the left. This is further exaggerated by great chest development, so that the placing of ligatures on the ovarian ligament sometimes requires patience. The abdominal wound is closed in three layers with catgut. It is protected by a pad of loosely rolled gauze held in position by three or four transverse sutures through the skin. Immediately after the operation the patient is placed in a suitable jacket which prevents interference with the wound. Anaesthesia usually lasts 4 to 6 hours. Daily observations are made and the sutures removed from the fifth to seventh day.

With the exception of being submitted to the operation all the bitches received similar treatment from birth. There have been no differences between the sterilised and non-sterilised bitches, either in training or racing performance, except that two of the former have shown a tendency to put on two or three pounds in weight at certain periods. For instance, Girl Friend (Table 2, No. 11), whose best racing weight has been assessed at 48½ pounds, suddenly went up to

51½ pounds and showed a slight loss of form. Despite increasing her training work, and reducing her diet, this bitch could not be brought down to her normal racing weight. "Army Beauty" (Table 2, No. 9), who was best at about 50½ pounds, recently went up to 52 pounds, and has not run quite so well as previously. Great difficulty has also been found in reducing this bitch's weight. Apart from these few instances oöphorectomised and normal bitches do not appear to differ in any way except that the former have never shown any symptoms of "heat".

A perusal of the following tables showing the racing performances of six normal bitches and twelve oöphorectomised litter sisters indicates that the racing potentialities of greyhounds is not interfered with when the ovaries are removed between the ages of six and twelve months.

TABLE 1.

The following are the racing performances of non-sterilised bitches running at Wembly Stadium:—

Lanard Lass; Comrade O'Grady—Lady Jester, March, 1938. (Litter sister to Miss O'Grady, Table 2, No. 3).

1939—		
August, 23.....	325 yards.....	2nd in 19·63 seconds.
September, 6.....	325 yards.....	4th in 19·46 seconds.
1940—		
January, 10.....	525 yards.....	2nd in 31·94 seconds.
January, 17.....	325 yards.....	1st in 19·59 seconds.
January, 24.....	525 yards.....	2nd in 31·78 seconds.
January, 31.....	525 yards.....	2nd in 31·62 seconds.
February, 7.....	325 yards.....	1st in 19·02 seconds.
February, 14.....	525 yards.....	3rd in 31·79 seconds.
February, 21.....	325 yards.....	5th in 19·63 seconds.
February, 28.....	525 yards.....	5th in 31·90 seconds.
March, 6.....	525 yards.....	4th in 32·05 seconds.

African Lily; Hell's Bells—Ida's Lily, May, 1938. Litter sister to Black Magic and Military Maid, Table 2, Nos. 1 and 5).

1939—		
November, 29.....	325 yards.....	5th in 20·23 seconds.
December, 6.....	325 yards.....	2nd in 19·69 seconds.
December, 20.....	325 yards.....	4th in 19·93 seconds.
1940—		
January, 10.....	325 yards.....	2nd in 19·25 seconds.
January, 17.....	325 yards.....	2nd in 19·77 seconds.
January, 24.....	325 yards.....	3rd in 19·15 seconds.
January, 31.....	325 yards.....	3rd in 19·31 seconds.
February, 7.....	325 yards.....	6th in 19·51 seconds.
February, 14.....	325 yards.....	2nd in 19·31 seconds.
February, 21.....	325 yards.....	1st in 19·46 seconds.
February, 28.....	325 yards.....	5th in 19·27 seconds.
March, 6.....	325 yards.....	5th in 19·48 seconds.
March, 13.....	325 yards.....	4th in 19·25 seconds.

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Enchantress ; Hell's Bells—Kilnafarna Lass, July, 1937. (Litter sister to Lady Make believe, Table 2, No. 6).

1939—		
May, 17.....	325 yards.....	5th in 20·12 seconds.
May, 24.....	325 yards.....	5th in 19·56 seconds.

Golden Jubilee ; Brigadier—Lady Jester, December, 1936. (Litter sister to Girl Friend, Table 2, No. 11).

1938—		
March, 23.....	525 yards.....	3rd in 32·30 seconds.
March, 30.....	525 yards.....	1st in 31·47 seconds.
April, 6.....	525 yards.....	1st in 31·24 seconds.
April, 13.....	525 yards.....	Fell.
April, 20.....	525 yards.....	4th in 31·42 seconds.
April, 27.....	525 yards.....	6th in 31·95 seconds.
May, 4.....	525 yards.....	3rd in 31·34 seconds.
May, 11.....	525 yards.....	2nd in 31·19 seconds.
May, 18.....	525 yards.....	5th in 31·51 seconds.
May, 25.....	525 yards.....	3rd in 31·20 seconds.
June, 1.....	525 yards.....	2nd in 31·12 seconds.
June, 8.....	525 yards.....	1st in 30·62 seconds.
June, 22.....	525 yards.....	4th in 31·24 seconds.
June, 29.....	525 yards.....	6th in 31·01 seconds.
July, 6.....	525 yards.....	5th in 31·59 seconds.
July, 13.....	525 yards.....	2nd in 30·87 seconds.
July, 27.....	525 yards.....	4th in 31·60 seconds.
August, 10.....	525 yards.....	4th in 31·45 seconds.
August, 17.....	525 yards.....	3rd in 31·34 seconds.
August, 24.....	525 yards.....	1st in 31·40 seconds.
September, 7.....	525 yards.....	2nd in 31·40 seconds.
September, 14.....	525 yards.....	3rd in 31·22 seconds.
September, 21.....	525 yards.....	2nd in 31·34 seconds.
September, 28.....	525 yards.....	2nd in 31·36 seconds.
October, 5.....	525 yards.....	1st in 30·77 seconds.
October, 12.....	525 yards.....	1st in 30·72 seconds.
October, 19.....	525 yards.....	5th fell.
October, 26.....	525 yards.....	6th in 31·03 seconds.
November, 2.....	525 yards.....	1st in 30·71 seconds.
November, 9.....	525 yards.....	5th in 31·16 seconds.
November, 16.....	525 yards.....	2nd in 31·27 seconds.
November, 23.....	525 yards.....	1st in 30·77 seconds.
November, 30.....	525 yards.....	4th in 30·60 seconds.
December, 14.....	525 yards.....	3rd in 30·85 seconds.
December, 21.....	525 yards.....	5th in 31·01 seconds.
December, 28.....	525 yards.....	5th in 31·03 seconds.
1939—		
January, 4.....	525 yards.....	3rd in 30·81 seconds.
January, 11.....	725 yards.....	4th in 44·29 seconds.
January, 18.....	525 yards.....	4th in 30·84 seconds.
January, 25.....	525 yards.....	4th in 30·95 seconds.
February, 1.....	725 yards.....	1st in 43·53 seconds.
February, 8.....	525 yards.....	3rd in 31·30 seconds.
February, 15.....	525 yards.....	5th in 31·59 seconds.
March, 1.....	525 yards.....	6th in 31·18 seconds.
March, 8.....	525 yards.....	5th in 31·26 seconds.
March, 15.....	525 yards.....	6th stopped.
May, 10.....	525 yards.....	5th in 31·66 seconds.
May, 17.....	525 yards.....	5th broke down.

Sister Susie : Brigadier—Rolling Pin, August, 1938. (Litter sister to Cookhouse Call, Table 2, No. 7).

1939—		
December, 13.....	325 yards.....	6th in 19·80 seconds.
December, 20.....	325 yards.....	1st in 19·12 seconds.
December, 27.....	325 yards.....	4th in 19·62 seconds.
1940—		
January, 17.....	525 yards.....	6th badly bumped.
January, 24.....	525 yards.....	1st in 31·77 seconds.
January, 31.....	525 yards.....	6th in 32·16 seconds.
February, 8.....	525 yards.....	3rd in 31·81 seconds.
February, 14.....	525 yards.....	4th in 32·34 seconds.
February, 21.....	325 yards.....	2nd in 19·49 seconds.
February, 28.....	525 yards.....	2nd in 31·51 seconds.
March, 6.....	525 yards.....	5th in 31·71 seconds.
March, 13.....	325 yards.....	1st in 19·10 seconds.
March, 20.....	325 yards.....	5th in 19·60 seconds.
March, 27.....	525 yards.....	4th in 31·74 seconds.

TABLE 2.

The following are the racing performances of sterilised bitches running at Wembley Stadium:—

No. 1.—*Military Maid* : by Brigadier—Kilnafarna Lass, July, 1938. Operation 30/5/38.

1939—		
December, 13.....	325 yards.....	2nd in 19·72 seconds.
December, 20.....	325 yards.....	3rd in 19·57 seconds.
December, 27.....	325 yards.....	1st in 19·65 seconds.
1940—		
January, 3.....	325 yards.....	4th badly baulked.
January, 10.....	325 yards.....	1st in 19·07 seconds.
January, 17.....	325 yards.....	1st in 19·27 seconds.
January, 24.....	525 yards.....	4th in 31·99 seconds.
January, 31.....	525 yards.....	1st in 31·61 seconds.
February, 7.....	525 yards.....	3rd in 31·87 seconds.
February, 14.....	525 yards.....	2nd in 32·01 seconds.
February, 21.....	325 yards.....	3rd in 19·52 seconds.
February, 28.....	525 yards.....	1st in 31·33 seconds.
March, 6.....	525 yards.....	2nd in 31·36 seconds.
March, 13.....	525 yards.....	2nd in 31·36 seconds.
March, 20.....	525 yards.....	2nd in 31·90 seconds.
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No. 2.—*Aandblom*; by Hell's Bells—*Ida's Lily*, March, 1938. Operation 21/11/38.

1939—		
August, 9	325 yards	6th in 19·91 seconds.
August, 16	325 yards	1st in 19·16 seconds.
August, 23	325 yards	1st in 19·03 seconds.
August, 30	325 yards	4th in 19·16 seconds.
September, 6	325 yards	4th in 19·11 seconds.
September, 13	325 yards	6th in 19·28 seconds.
September, 27	325 yards	2nd in 19·01 seconds.
September, 27	325 yards	2nd in 18·96 seconds.
October, 11	525 yards	2nd in 30·91 seconds.
October, 18	525 yards	3rd in 31·39 seconds.
October, 25	525 yards	4th in 31·06 seconds.
November, 1	525 yards	6th badly bumped.
November, 8	325 yards	3rd in 19·24 seconds.
November, 15	525 yards	3rd badly bumped.
November, 22	325 yards	4th in 19·32 seconds.
November, 29	325 yards	2nd in 19·13 seconds.
December, 6	325 yards	3rd in 19·13 seconds.
December, 13	525 yards	3rd in 31·27 seconds.
December, 20	525 yards	2nd in 31·53 seconds.
December, 27	525 yards	6th in 31·74 seconds.
1940—		
January, 3	525 yards	2nd in 31·42 seconds.
January, 10	525 yards	5th in 31·87 seconds.
January, 17	325 yards	6th in 19·63 seconds.
January, 24	325 yards	3rd in 19·61 seconds.
January, 31	325 yards	3rd in 19·45 seconds.
February, 7	325 yards	4th in 19·21 seconds.
February, 14	325 yards	3rd in 19·32 seconds.
February, 21	325 yards	5th in 19·67 seconds.
February, 28	325 yards	1st in 18·90 seconds.
March, 6	325 yards	2nd in 19·01 seconds.
March, 13	325 yards	6th in 20·06 seconds.
March, 20	325 yards	3rd in 19·21 seconds.

No. 3.—*Miss O'Grady*; by Comrade O'Grady—*Lady Jester*, March, 1938. Operation 3/11/38.

1939—		
August, 2	325 yards	5th in 19·62 seconds.
August, 16	325 yards	2nd in 19·40 seconds.
August, 30	325 yards	1st in 18·99 seconds.
September, 6	325 yards	4th in 19·15 seconds.
September, 13	325 yards	5th in 19·32 seconds.
September, 20	325 yards	3rd in 19·25 seconds.
October, 11	525 yards	5th in 31·37 seconds.
October, 18	525 yards	2nd in 31·43 seconds.
October, 25	525 yards	4th in 31·58 seconds.
November, 1	525 yards	5th badly impeded.
November, 8	325 yards	4th in 19·26 seconds.
November, 15	525 yards	5th badly bumped.
November, 29	325 yards	6th in 19·20 seconds.
December, 6	325 yards	1st in 18·77 seconds.
1940—		
February, 28	325 yards	6th in 19·45 seconds.
March, 6	325 yards	4th in 19·46 seconds.
March, 13	325 yards	6th in 19·53 seconds.
March, 20	325 yards	2nd in 19·14 seconds.
March, 27	325 yards	1st in 19·20 seconds.

No. 4.—*Lee Wind* ; by Pytchley—Battle Wind, September, 1938. Operation 22/8/39.

1940—		
March, 6.....	325 yards.....	5th in 19·99 seconds.
March, 13.....	325 yards.....	4th in 19·64 seconds.
March, 20.....	325 yards.....	3rd in 19·71 seconds.

No. 5.—*Black Magic* ; by Hell's Bells—*Ida's Lily*, May, 1938. Operation 8/11/38.

1939—		
August, 23.....	325 yards.....	5th in 20·48 seconds.
November, 22.....	325 yards.....	3rd in 20·10 seconds.
1940—		
January, 31.....	325 yards.....	6th in 19·99 seconds.
February, 7.....	325 yards.....	5th (knocked over).
March, 20.....	325 yards.....	2nd in 19·65 seconds.

No. 6.—*Lady Makebelieve* ; by Hell's Bells—*Kilnafarna Lass*, July, 1937. Operation 19/7/38.

1939—		
May, 17.....	325 yards.....	2nd in 19·33 seconds.
May, 24.....	325 yards.....	5th in 19·64 seconds.
1940—		
January, 3.....	525 yards.....	5th in 32·16 seconds.
January, 10.....	525 yards.....	3rd in 32·12 seconds.
January, 17.....	525 yards.....	2nd in 31·94 seconds.
January, 24.....	525 yards.....	3rd in 31·96 seconds.
January, 31.....	525 yards.....	3rd in 31·76 seconds.
February, 8.....	525 yards.....	2nd in 31·78 seconds.
February, 14.....	525 yards.....	5th in 32·28 seconds.

No. 7.—*Cookhouse Call* ; by Brigadier—*Rolling Pin*, August, 1938. Operation 5/7/39

1939—		
December, 13.....	325 yards.....	3rd in 19·78 seconds.
December, 20.....	325 yards.....	5th in 20·32 seconds.
December, 27.....	325 yards.....	4th in 19·75 seconds.
January, 3.....	325 yards.....	2nd in 19·85 seconds.
January, 10.....	325 yards.....	5th in 19·74 seconds.
January, 17.....	325 yards.....	3rd in 19·86 seconds.
January, 24.....	325 yards.....	3rd in 19·61 seconds.
January, 31.....	325 yards.....	3rd in 19·82 seconds.
February, 7.....	325 yards.....	1st in 19·69 seconds.
February, 14.....	525 yards.....	3rd in 32·22 seconds.
February, 21.....	525 yards.....	5th in 32·09 seconds.
February, 28.....	525 yards.....	3rd in 31·99 seconds.
March, 6.....	525 yards.....	5th in 32·07 seconds.
March, 13.....	325 yards.....	2nd in 19·16 seconds.
March, 20.....	325 yards.....	6th in 19·60 seconds.

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No. 8.—*Laughing Lass*; by Laughing Cavalier—Kilnafarna Lass, January, 1938.
Operation 8/11/38.

1939—		
November, 22.....	325 yards.....	4th in 20·18 seconds.
November, 29.....	325 yards.....	4th in 20·22 seconds.
December, 6.....	325 yards.....	1st in 19·65 seconds.
December, 13.....	325 yards.....	6th in 20·08 seconds.
December, 20.....	325 yards.....	5th in 19·80 seconds.
December, 27.....	325 yards.....	2nd in 19·54 seconds.
1940—		
January, 3.....	325 yards.....	5th (badly baulked).
January, 10.....	325 yards.....	4th in 19·62 seconds.
January, 17.....	325 yards.....	6th (badly baulked).
January, 24.....	325 yards.....	5th in 19·73 seconds.
January, 31.....	325 yards.....	2nd in 19·71 seconds.
February, 7.....	325 yards.....	2nd in 20·15 seconds.
February, 21.....	525 yards.....	6th in 32·21 seconds.
February, 28.....	525 yards.....	2nd in 31·93 seconds.
March, 6.....	525 yards.....	1st in 31·38 seconds.

No. 9.—*Army Beauty*; Brigadier—Kilnafarna Lass, July, 1938. Operation 2/5/39.

1939—		
December, 13.....	325 yards.....	4th in 19·81 seconds.
December, 20.....	325 yards.....	2nd in 19·42 seconds.
December, 27.....	325 yards.....	1st in 19·24 seconds.
1940—		
January, 3.....	325 yards.....	2nd in 19·09 seconds.
January, 17.....	325 yards.....	5th in 19·60 seconds.
January, 24.....	325 yards.....	1st in 19·22 seconds.
January, 31.....	525 yards.....	5th in 32·07 seconds.
February, 7.....	525 yards.....	1st in 31·77 seconds.
February, 14.....	525 yards.....	1st in 31·40 seconds.
February, 21.....	525 yards.....	1st in 31·20 seconds.
February, 28.....	325 yards.....	4th in 19·05 seconds.
March, 6.....	525 yards.....	6th (badly baulked).
March, 13.....	525 yards.....	2nd in 31·33 seconds.
March, 20.....	525 yards.....	4th (Baulked.)

No. 10.—*Charity's Aid*; by Moss Trooper—Mick the Damozelle. December, 1936.
Operation 21/5/37.

1938—		
July, 6.....	525 yards.....	3rd in 31·77 seconds.
July, 20.....	525 yards.....	6th (fell over).
August, 31.....	525 yards.....	5th in 32·49 seconds.
September, 7.....	525 yards.....	1st in 31·88 seconds.
September, 21.....	525 yards.....	5th in 32·39 seconds.
September, 28.....	525 yards.....	5th in 32·07 seconds.
October, 12.....	525 yards.....	5th in 32·89 seconds.
October, 19.....	525 yards.....	5th in 32·58 seconds.
November, 16.....	525 yards.....	5th in 32·17 seconds.
November, 23.....	525 yards.....	6th in 32·35 seconds.
December, 7.....	525 yards.....	5th in 32·32 seconds.
December, 14.....	525 yards.....	4th in 32·31 seconds.
December, 28.....	525 yards.....	4th in 32·91 seconds.

1939—		
January, 4	525 yards	5th in 32·34 seconds.
January, 11	525 yards	4th in 32·08 seconds.
March, 22	325 yards	5th in 19·63 seconds.
April, 5	325 yards	4th in 19·45 seconds.
April, 12	325 yards	4th in 19·43 seconds.
April, 26	525 yards	4th in 32·14 seconds.
May, 3	325 yards	5th in 20·26 seconds.
May, 24	325 yards	3rd in 19·40 seconds.
June, 7	525 yards	5th in 32·19 seconds.
June, 14	325 yards	5th in 19·86 seconds.
June, 21	325 yards	1st in 19·13 seconds.
June 28	525 yards	1st in 31·41 seconds.
July 5	525 yards	6th in 31·90 seconds.
July 12	525 yards	2nd in 31·43 seconds.
July 19	525 yards	6th (badly baulked).
August 2	525 yards	5th in 32·20 seconds.
August 9	525 yards	5th in 31·97 seconds.
August 16	525 yards	5th in 32·07 seconds.
August 23	525 yards	3rd in 32·11 seconds.
August 30	525 yards	2nd in 31·59 seconds.
September 6	525 yards	3rd in 31·86 seconds.
September 13	525 yards	6th in 32·00 seconds.
September 20	525 yards	4th in 31·79 seconds.
September, 27	525 yards	4th in 32·08 seconds.
October, 4	525 yards	6th (badly bumped).
December 6	525 yards	4th in 32·74 seconds.

No. 11.—*Girl Friend*: by Brigadier—Lady Jester, December, 1936. Operation 21 5 37

1938—		
April, 6	525 yards	3rd in 31·92 seconds.
April, 13	525 yards	1st in 31·70 seconds.
April, 20	525 yards	3rd in 31·35 seconds.
April, 27	525 yards	4th in 31·42 seconds.
May, 4	525 yards	1st in 31·22 seconds.
May, 11	525 yards	5th in 31·61 seconds.
May, 18	525 yards	2nd in 31·22 seconds.
May, 25	525 yards	5th in 31·35 seconds.
June, 1	525 yards	1st in 31·11 seconds.
June, 8	525 yards	2nd in 30·92 seconds.
June, 15	525 yards	5th in 31·48 seconds.
June, 22	525 yards	6th in 31·37 seconds.
June, 29	525 yards	3rd in 31·22 seconds.
July, 6	525 yards	3rd in 31·47 seconds.
July, 13	525 yards	5th in 31·22 seconds.
July, 20	525 yards	4th in 31·49 seconds.
July, 27	525 yards	6th in 31·78 seconds.
August, 3	525 yards	1st in 30·87 seconds.
August, 10	525 yards	5th in 31·45 seconds.
August, 17	525 yards	5th in 32·01 seconds.
August, 24	525 yards	2nd in 31·41 seconds.
August, 31	525 yards	5th in 31·77 seconds.
September, 7	525 yards	3rd in 31·30 seconds.
September, 14	525 yards	4th in 31·38 seconds.
September, 21	525 yards	6th in 31·45 seconds.
December, 7	525 yards	3rd in 31·08 seconds.
December, 14	525 yards	6th in 31·45 seconds.
December, 21	525 yards	4th in 31·30 seconds.
December, 28	525 yards	3rd in 31·42 seconds.

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1939—		
January, 4.....	525 yards.....	4th in 31·54 seconds.
January, 11.....	525 yards.....	2nd in 31·40 seconds.
January, 18.....	525 yards.....	3rd in 31·67 seconds.
January, 25.....	525 yards.....	6th in 31·66 seconds.
February, 22.....	525 yards.....	4th in 31·53 seconds.
March, 1.....	525 yards.....	5th (fell first bend).
March, 8.....	525 yards.....	2nd in 31·53 seconds.
March, 15.....	525 yards.....	2nd in 31·67 seconds.
March, 22.....	525 yards.....	5th in 31·86 seconds.
March, 29.....	525 yards.....	1st in 31·44 seconds.
April, 5.....	525 yards.....	3rd in 31·70 seconds.
April, 12.....	525 yards.....	2nd in 31·25 seconds.
April, 19.....	725 yards.....	4th in 44·17 seconds.
April, 26.....	525 yards.....	4th in 31·79 seconds.
May, 3.....	725 yards.....	6th in 44·33 seconds.
May, 10.....	725 yards.....	1st in 44·11 seconds.
May, 17.....	525 yards.....	2nd in 31·62 seconds.
May, 24.....	725 yards.....	4th in 43·96 seconds.
May, 31.....	525 yards.....	2nd in 31·47 seconds.
June, 7.....	525 yards.....	1st in 31·42 seconds.
June, 14.....	725 yards.....	6th in 44·72 seconds.
June, 28.....	525 yards.....	4th in 31·95 seconds.
July, 5.....	525 yards.....	5th in 31·90 seconds.
July, 12.....	525 yards.....	3rd in 31·28 seconds.
July, 19.....	525 yards.....	5th (badly bumped).
July, 26.....	525 yards.....	3rd in 31·47 seconds.
August, 2.....	525 yards.....	4th in 31·51 seconds.
August, 30.....	525 yards.....	1st in 31·67 seconds.
September, 6.....	525 yards.....	4th in 31·72 seconds.
September, 13.....	525 yards.....	5th in 32·42 seconds.
September, 20.....	725 yards.....	3rd in 44·49 seconds.
September, 27.....	525 yards.....	3rd in 32·56 seconds.
October, 4.....	725 yards.....	2nd in 44·71 seconds.
October, 11.....	525 yards.....	6th in 31·55 seconds.
October, 18.....	725 yards.....	1st in 44·71 seconds.
October, 25.....	725 yards.....	4th in 44·63 seconds.
November, 1.....	725 yards.....	6th injured.

No. 12.—*Suikerbossie*; by Hell's Bells—Last Queen, born September, 1937. Operation 23/6/38.

1938—		
December, 28.....	525 yards.....	1st in 32·27 seconds.
1939—		
January, 4.....	525 yards.....	2nd in 31·90 seconds.
January, 11.....	525 yards.....	2nd in 31·74 seconds.
January, 18.....	525 yards.....	3rd in 31·76 seconds.
January, 25.....	525 yards.....	2nd in 32·41 seconds.
February, 8.....	525 yards.....	2nd in 31·38 seconds.
February, 22.....	525 yards.....	1st in 31·20 seconds.
March, 1.....	525 yards.....	3rd in 31·55 seconds.
March, 15.....	525 yards.....	4th in 31·89 seconds.
May, 17.....	525 yards.....	2nd in 31·46 seconds.
May, 24.....	525 yards.....	1st in 30·50 seconds.
May, 31.....	325 yards.....	1st in 18·98 seconds.
June, 7.....	325 yards.....	2nd in 19·04 seconds.
June, 14.....	325 yards.....	6th in 18·87 seconds.
June, 28.....	325 yards.....	5th (badly bumped).
July, 5.....	525 yards.....	2nd in 30·92 seconds.

1939 (continued)—		
October, 18.....	525 yards.....	3rd in 31·70 seconds.
October, 25.....	525 yards.....	3rd in 31·34 seconds.
November, 1.....	525 yards.....	3rd in 31·40 seconds.
November, 8.....	525 yards.....	1st in 31·17 seconds.
November, 15.....	525 yards.....	2nd in 31·00 seconds.
November, 22.....	525 yards.....	1st in 31·50 seconds.
November, 29.....	525 yards.....	3rd in 31·05 seconds.
December, 6.....	525 yards.....	2nd in 30·88 seconds.
December, 13.....	525 yards.....	5th in 31·30 seconds.
December, 20.....	525 yards.....	2nd in 31·07 seconds.
December, 27.....	525 yards.....	1st in 30·99 seconds.
1940—		
January, 3.....	525 yards.....	1st in 30·76 seconds.
January, 10.....	525 yards.....	3rd in 30·97 seconds.
January, 17.....	525 yards.....	2nd in 30·75 seconds.
January, 24.....	525 yards.....	2nd in 30·88 seconds.
January, 31.....	325 yards.....	6th in 19·41 seconds.
February, 7.....	525 yards.....	5th in 30·96 seconds.
February, 14.....	525 yards.....	2nd in 30·95 seconds.
February, 21.....	525 yards.....	1st in 30·63 seconds.
February, 28.....	525 yards.....	3rd in 30·74 seconds.
March, 6.....	525 yards.....	2nd in 30·80 seconds.
March, 13.....	525 yards.....	3rd in 30·88 seconds.
March, 20.....	525 yards.....	2nd in 30·96 seconds.

CONCLUSIONS.

1. Thirty-six greyhound bitches between the ages of six and 12 months have been oöphorectomised.
2. The oöphorectomised bitches have never shown the psychological or clinical symptoms of "heat".
3. Two oöphorectomised bitches have shown a tendency to slight increase in weight, 2-3 pounds, above that estimated as their best racing weights. Difficulty has been experienced in controlling the weight of these two bitches.
4. The performance of the oöphorectomised bitches has been comparable with that of their litter sisters.
5. Oöphorectomy appears to be a practical method of overcoming the difficulty experienced with greyhound bitches necessitating enforced rest from racing following each "heat" period.
6. Greyhound stud owners should consider the advisability of oöphorectomising all females not destined for stud purposes.