

HORS

Moku Manu

16 May '67

RFB on top

1 small downy chick

1 sdc

1 e

int phase

~~SDC~~^{egg}

||||| ||||| ||||| |||||

(43)

egg

||||| ||||| ||||| ||||| |||||

SDC

||||| ||||| |||||

(15)

MDC

||||| ||||| ||||| ||||| |||||

(2)

LDC

Naked

||||| ||||| ||||| ||||| |||||

nests/no egg

|||||

(4)

757-60 538 ~ naked chick

next page

B Ruby

2 eggs in portulaca

egg // 2 egg

naked

SDC

MDC //

LDC

~~///~~ (35)

RFB

Egg	 	17
naked	 	13
SDC	 	5
MDC	 	20
LDC		
Nest	/	/

Bare	4, 1	(5)
e	48, 17	(65)
Nab	13, 35	(48)
SDC	15, 5	(20)
MDC	29, 20	(49)
LDC	- -	

Positive rat

small - looks like

dark pelage rattus rattus

4:30 afternoon



Afternoon Tuesday

light variable wind

2-5 knots -

light high overcast

with windward haze

heavy overcast

but not extending

this far out

Sooty terns

no egg float run

Sooty terns ~~fledged~~
chicks ca. half
down & feathered on
wings and sides tracts.

Red-foots
almost wholly nesting
in Chenopodium obovense
nests low about 1 1/2 feet
off ground

Chenopodium



Brown Body

Continuous spectrum

LEA

Bands

767-534~~0~~01-

767-53298-300

298 F / N chib

299 M / MDC

300 F / MDC

401 ~~SD~~ N&H

402 A / SDC

03 SD

04 MD

05 R

06 N&H

07 MDC

08 R

09 R

10 R

11 SD

12 MP

13

LDC

14

MD

15

16

17

18

19

LD

20

MD

21

NC

22

MD

23

~~MD~~

NC 44-725-929

24

LD

25

MD

26

E

27

LD

28

SD

29

NC

30

NC

31 - E
32 ~~NE~~ Rost
33 Sub Ad
34 N C
35 N C
36 M D
37 M D
38 M D
39 N E
40 N C
41 ~~SDC~~ SDC
42 ~~SDC~~ SDC
43 R 5D
44 ~~SR~~ R
45 SN
46 RRR
47 O E
48 O E
49 N C
50 SD

51	Ne
52	Ne
53	N E
54	N N
55	SDC
56	E
57	E
58	N SD
59	N SD
60	R
61	R
62	MD
63	R
64	MD
65	MD
66	MD
67	R
68	OE
69	SNE
70	R

71	MD
72	MD
73	R
74	R
75	R
76	SD
77	<u>Sub Adult</u>
78	R
79	R
80	R
81	OE
82	Ne
83	SDC
84	OE
85	R
86	R
87	OE
88	OE
89	OE

90

R

91

OE

92

R

93

SDC

94

R

95

R

96

OE

97

SD

98

SN

99

~~SADALT~~

100

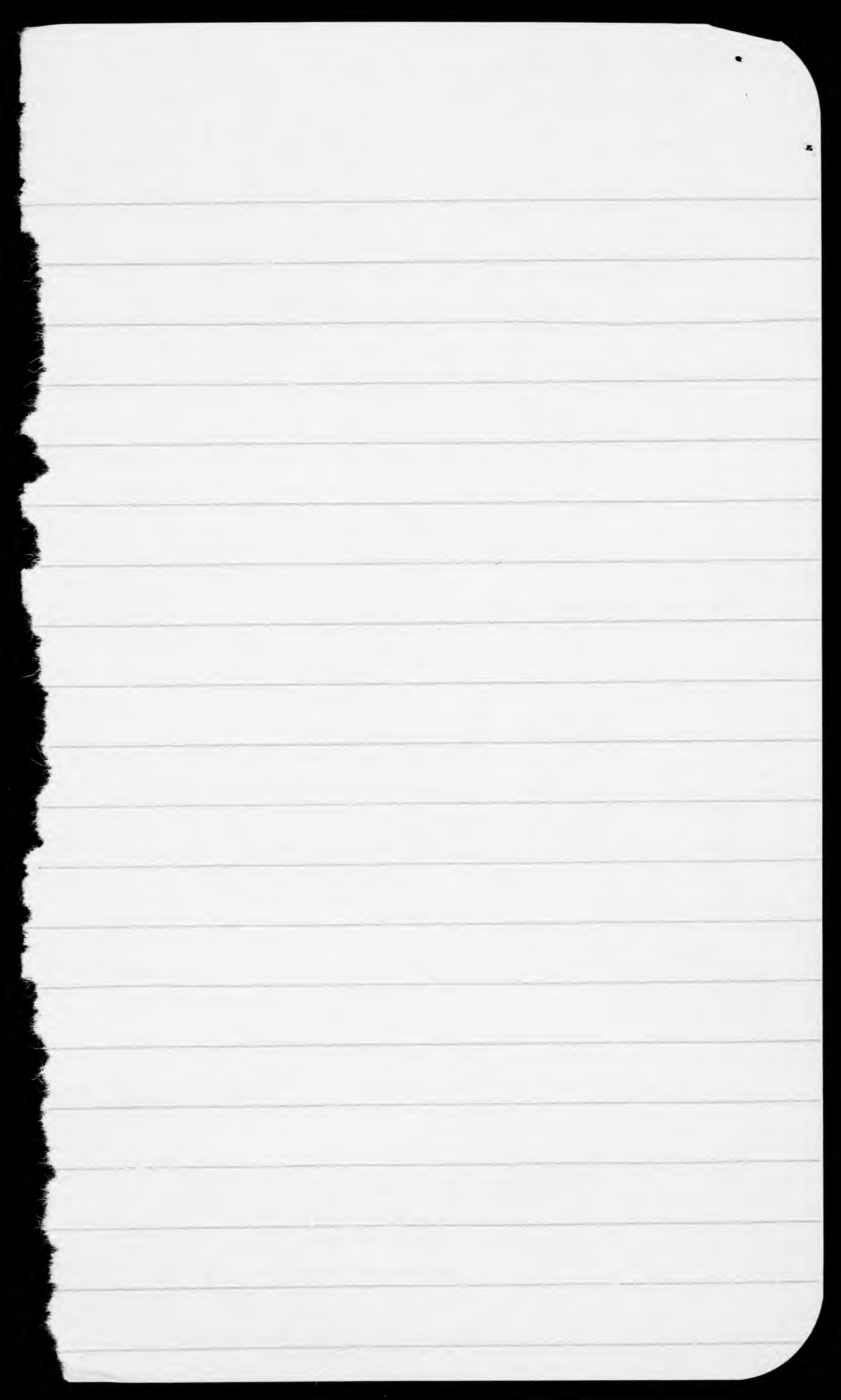
R

100

Frank Smith
Moku Manu
16 May '67

General Notes

Redfooted boobies are nesting
~~in fairly uniform density~~ over
the top of the island in
Chenopodium Oahuensis
using same as nesting material
Nests average about 1 ft. off
the ground. All birds seen
were light phase except one Int
Phase. The area of greatest
density is at N and E ends
of island where nests are
about 10 ft apart on the
average



Sooty Terns

Have suffered severe nesting failure over the entire island. Estimated 100,000 rotten eggs. Small survival rate among young - no more than 1500 chicks (2 to 3 weeks old) are still alive. Estimate of 3000 dead chicks found over island. Estimate of 20,000 adults swirling over island at 1630.

Christmas Island Shearwater

2 nests found (each containing
1 egg) in rock crevices
at north end of island.

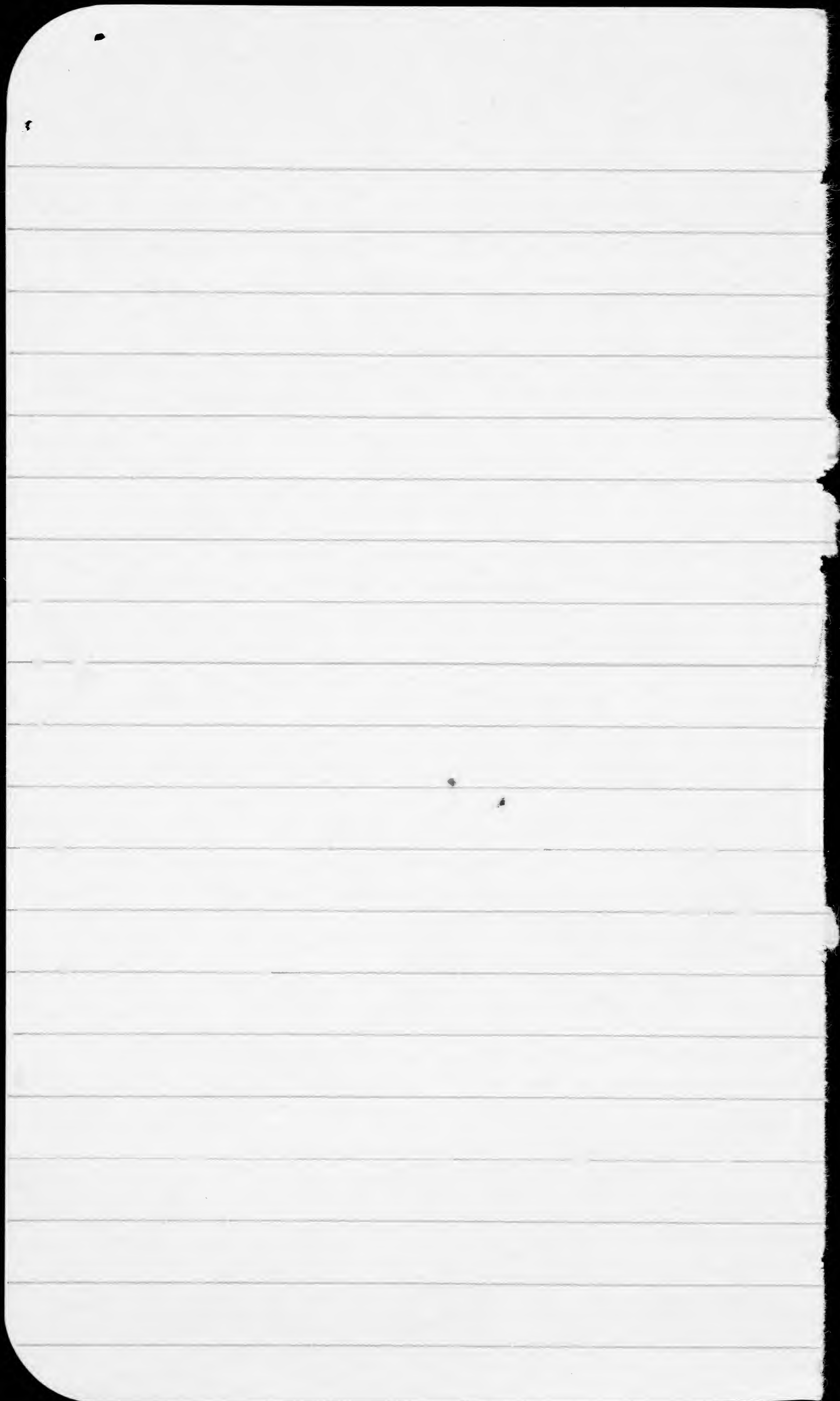
Undoubtedly many more
were undiscovered.

Common Noddy Tern

Haw Noddy Tern

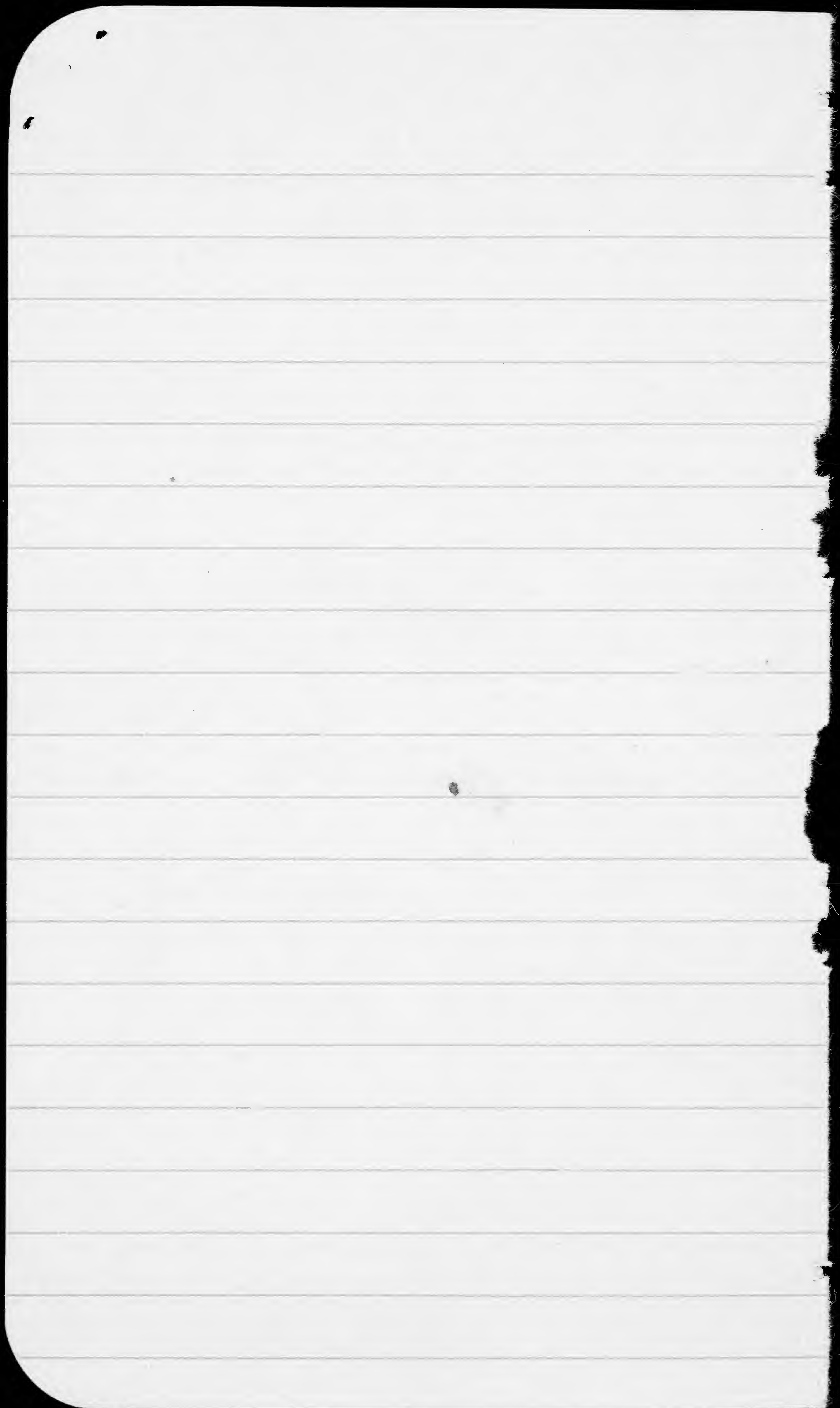
Red footed Booby Banding
16 May

767-53301



Great Frigatebird

1630 - approx 500 roosting
on edges of cliffs around
W, N, E ends of island -
roosting in *Chenopodium*
Outaensis - the dominant
plant on the top - Estimated
additional 1000 birds in
air over sooty tern colony



• Stadel

Moku Manu

16 May 67

Brown Booby

OE	ORE	Ne	S de	T
0	0	III	III III	
III	IIIIII	III	/	
	IIII	III	II	
5	III	13		
	20			

MDC	L DC	Imm	B rd
-----	------	-----	------

III	IXII		
-----	------	--	--

III			
-----	--	--	--

III	6		
-----	---	--	--

5			
---	--	--	--

RFB



OEPO2	X	SDC	MPC
 	 	 	
 	 	 	
 	 	 	
 	 	 	
 	 		10
 	 	36	
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
 	 		
50	40		136

RFB



LDC

Imm

Birds

~~© 5m A ©~~

Ch-

20

30

40

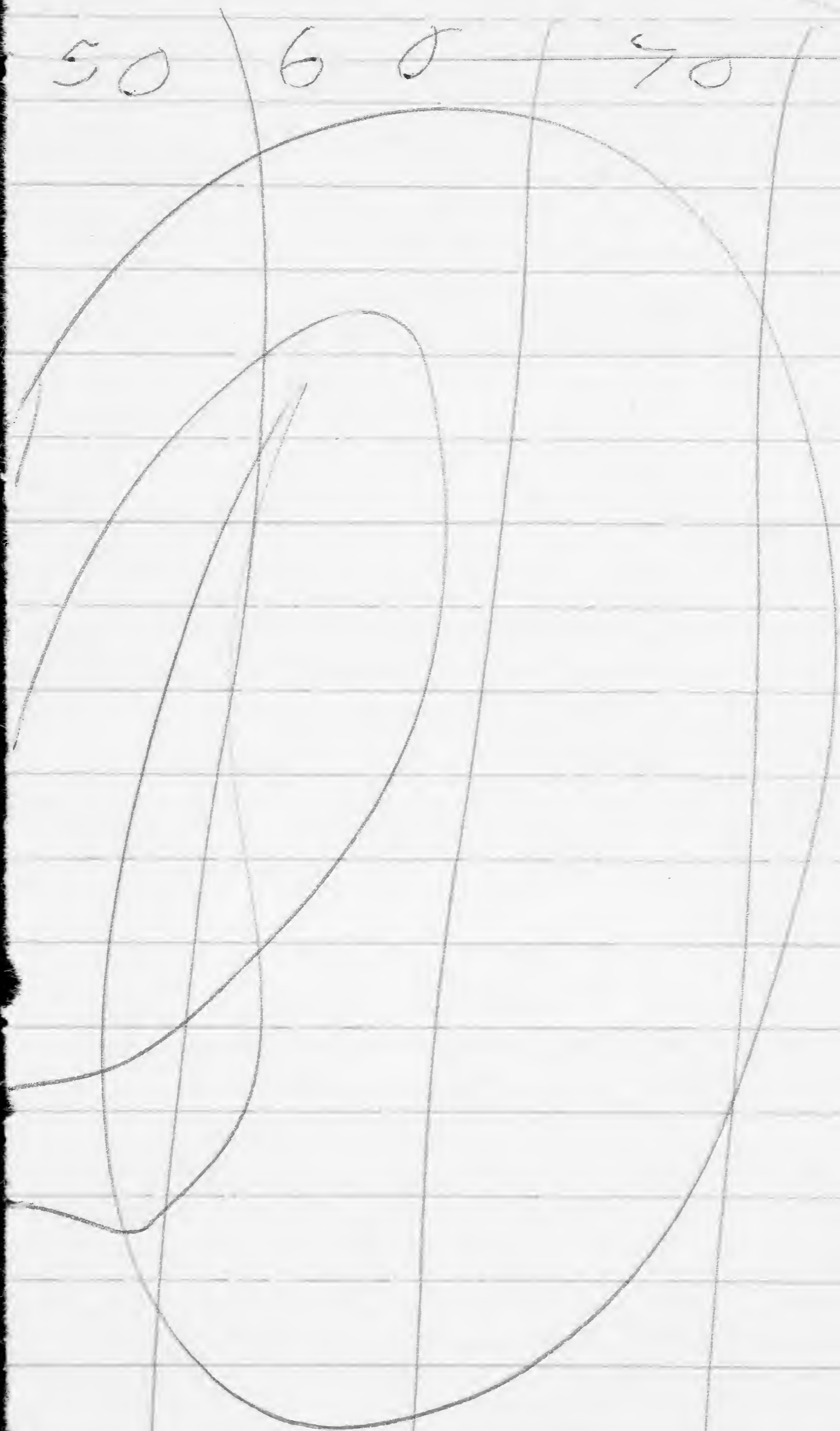


50

60

70

80 90



Sooty T

Chick 36 days
10

10 chicks

20 - 50,000 Rotten Eggs

GB Tern

Chick 80+ days

10-30-58

100 Nests all chicks



Blue-face B

O 2 E

RFB Returns :

757-89648

MDC

Great Frigate

100 Birds No Nests

Wedgetail

No Eggs found
Estimate

F.C. Thompson

16 May 1967

~~MAHINA~~

MOKU MANU

Returns

737-43605
ADIP-05
50399
Black-INC
48369

WG
1E Not
###

WOC

1

2

INC

###

###

###

###

###

###

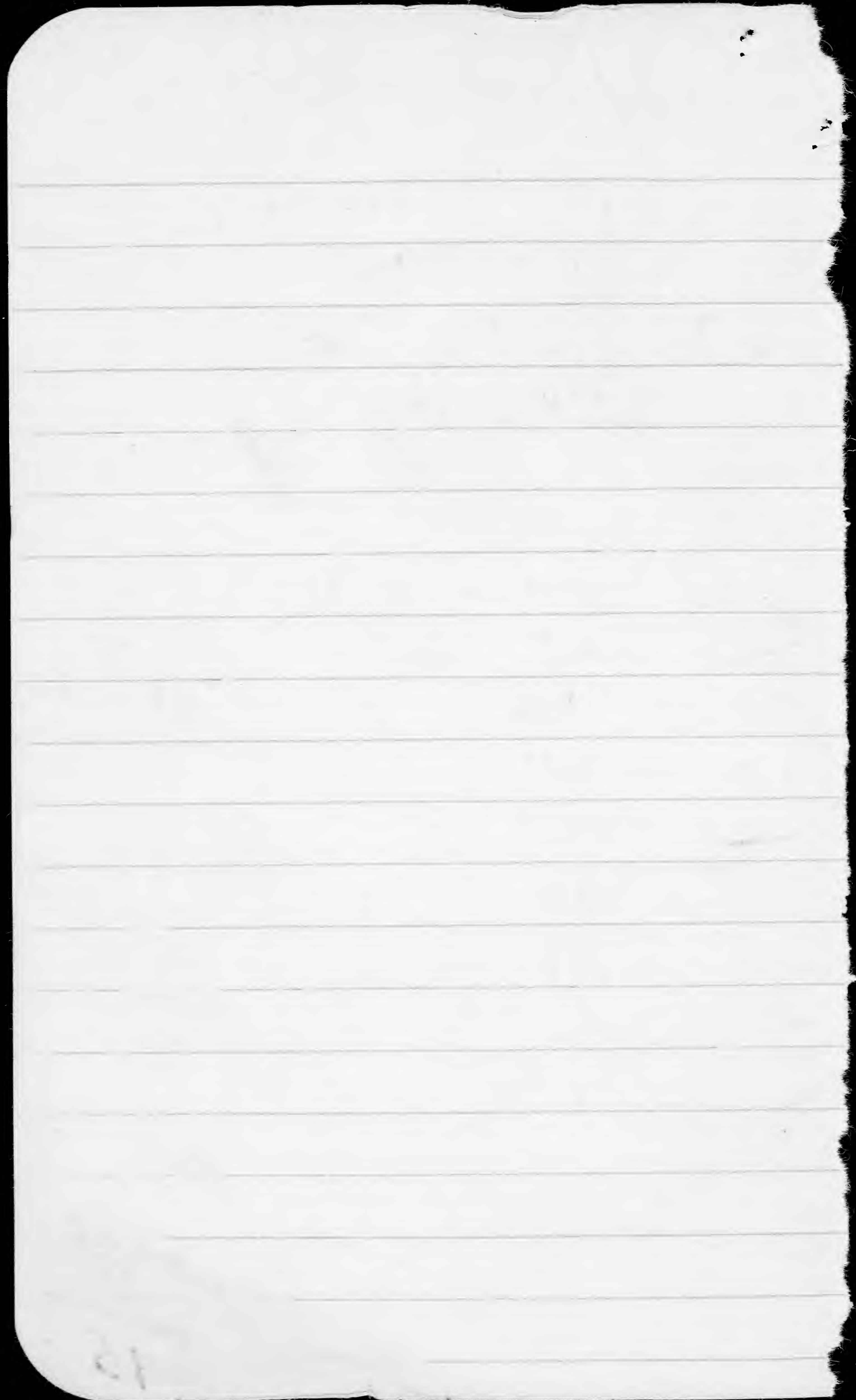
###

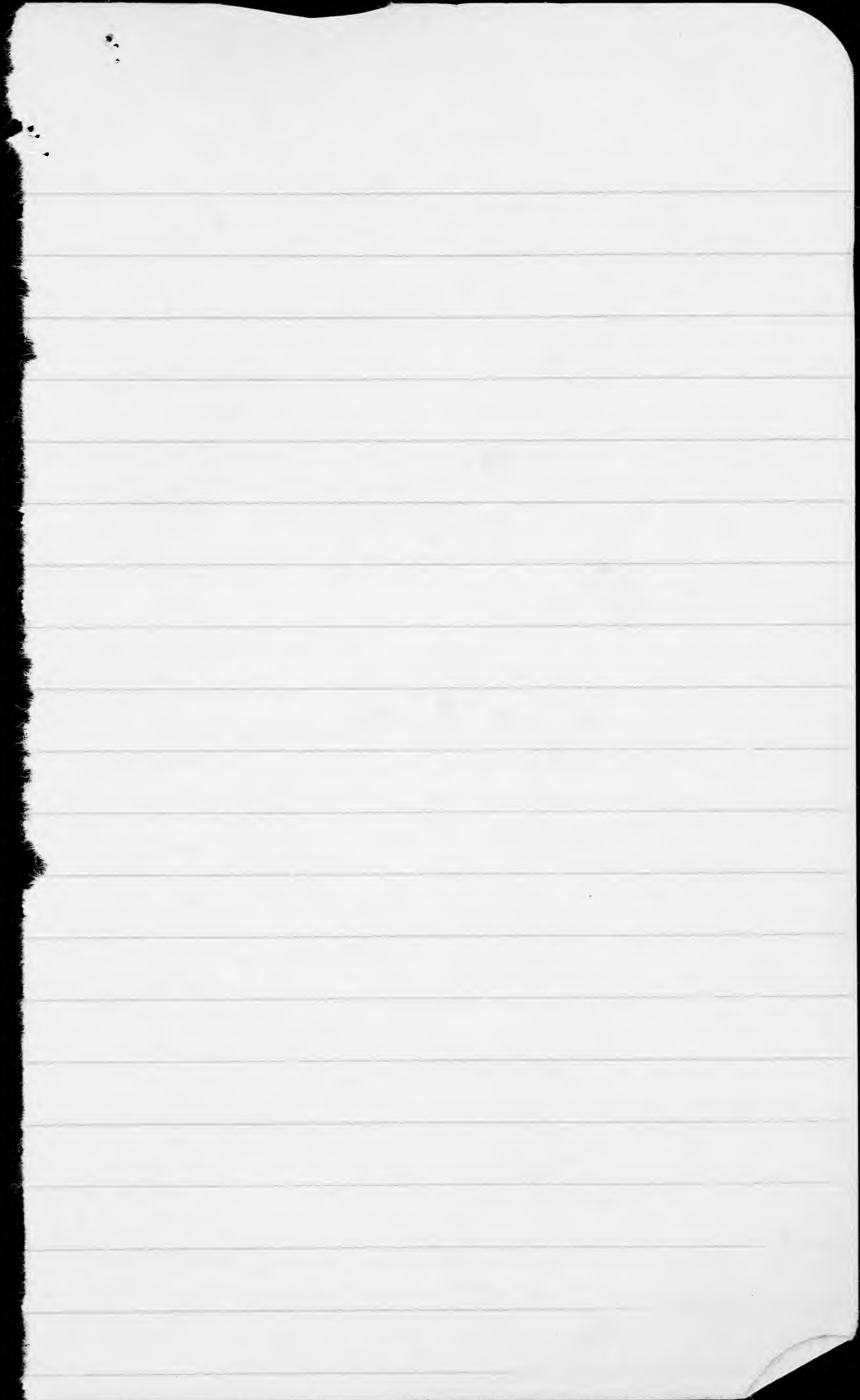
###

###

1

41





INC

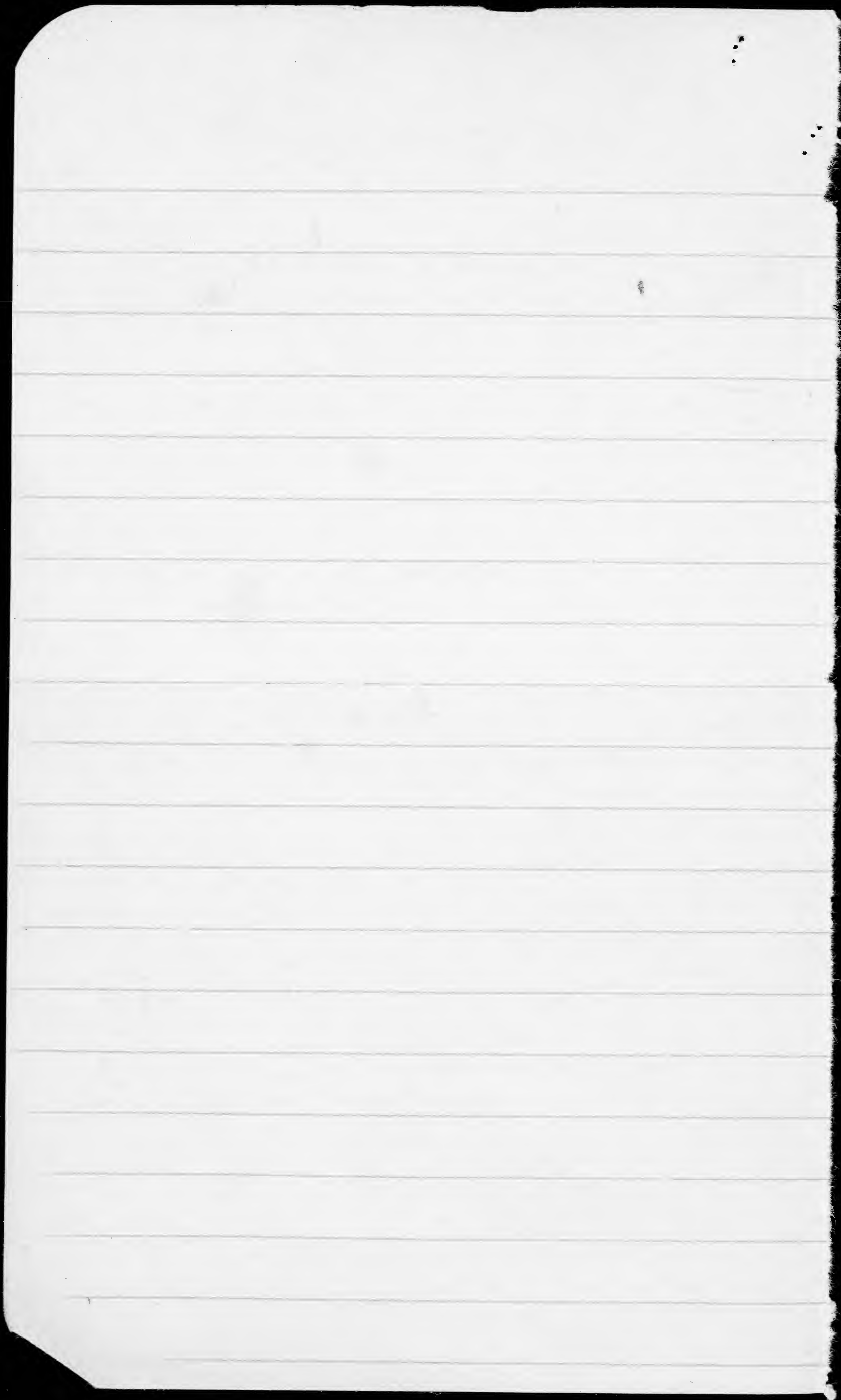
11

2

BS

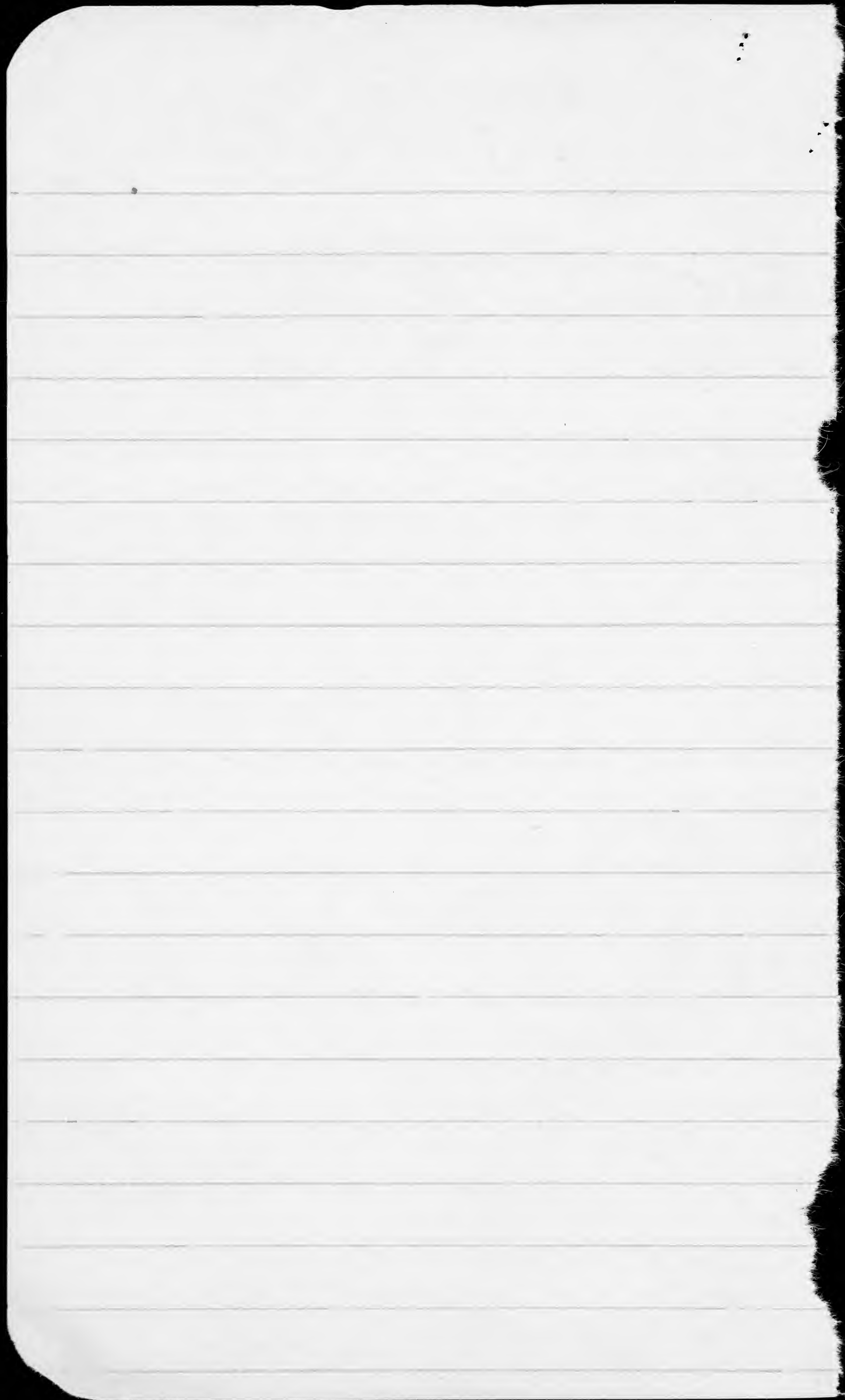
1E	2E	3DC	4E	1LC
 	 	 	 	
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
5	6	5	13	4

5mm
!



BFB

GADs.



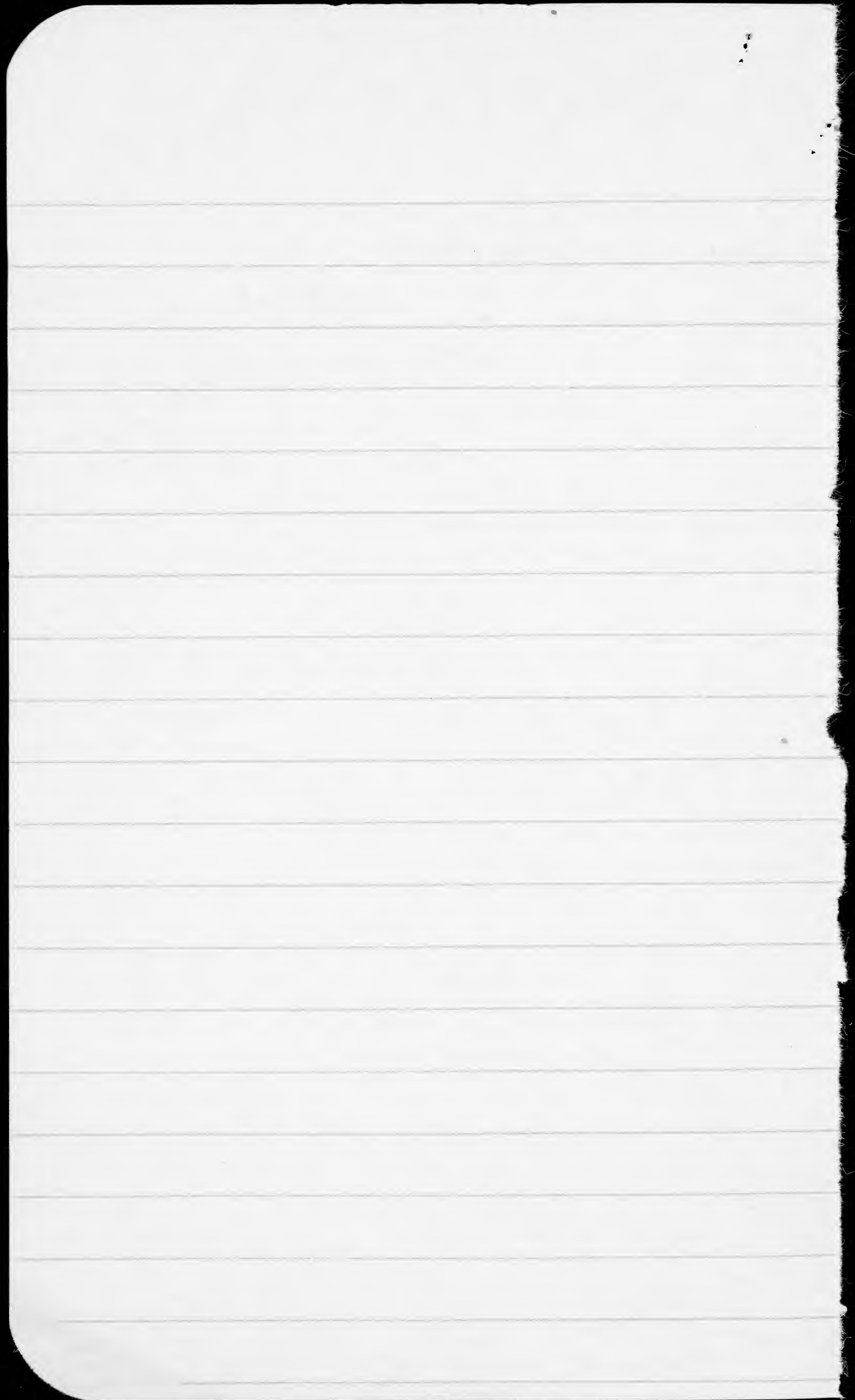
ST

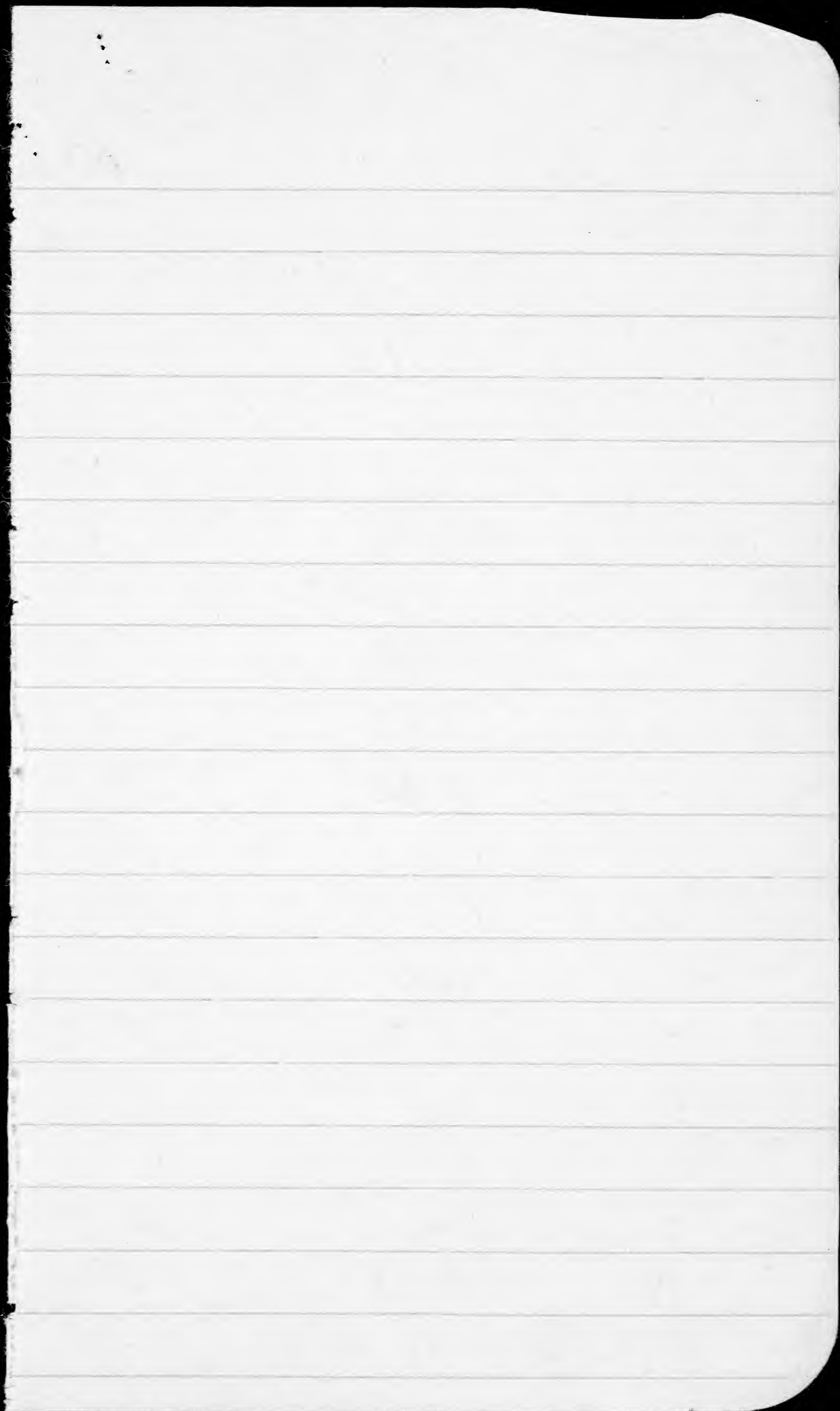
- large scale nest failure

→ only about 1000 chicks

alive - 150,000 rotten eggs

50,000 Dead chicks





X indicates chick killed for gross serum sample

<u>Specimens</u>	<u>Status</u>	<u>Sex</u>
1294 WFB	INC	M
295 D	IE	-
396	INC	M
497	IE	-
598	IE	-
699	IE	M
7300	IE	F
8301	ISD ^{x1}	F
9302 Sm	IE	F
10303*	ISD	M
104	1 SK	M
205 sm	ISD*2x	M
306D	IE	-
407 sm	INC	M
508 sm	INC	F
609	IE	F
710D	INC	M
812 sm	IE IE	M M
912 puff	IE IDC	F
20318 D	INC	-

all LP
except
if noted

(BAND)
767-53201

202

03

04

05

06

07

08

~~767~~ 757-60789

09

10

11

12

767-50399

14 ~~767-53201~~

- 16

- 15

- 18

- 19

- 20

JNT

	Species	Status	Sex
21	H 314	INC	M
2	H 316	IE	F
3	H 17	IE	F
9	D 18	INC	F
5	H 19	IMC ^{4x}	F
6	H 20	IMC ^{5x}	M
7	S 21	ISD	F
8	H 22	IE	M
9	D 23	INC	F
20	H 24	IE	-
1	D 25	IE	-
2	Gw 26	IPC	F
3	H 27	IE	F
4	D 28	IE	M
5	D 29	INC	F
6	Gw 30	INC	F
7	Gw 31	IPC	F
8	H 32	IE	M
9	S 33	IE	F
40	D 334	ISPC	F

decrease all following sera sample numbers by 1

BAND

- 13

- 17

- 21

- 23

- 24

- 25

- 26

737 - 45051

- 27

- 28

- 29

- 30

- 31

- 32

TRANSACTIONS - 33

↳ 737 - 45015

- 34

- 35

- 36

737 - 45017

- 7x without Parents

41	335	M	1 MC67		M
2	36	Sm	1 SDC		F
3	37	H	1 E		M
9	38	Sm	1 SDC		M
3	39	H	1 U		M
6	40	D	1 NC		F
7	41	S	1 E	1 DC	F
8	42	D	1 E	1 DC	M
9	43	S	1 NC		M
50	344	H	1 DC		M
1	45	S	1 DC		F
2	46	H S	— R		F M
3	47	S	1 DC		M
4	48	O	1 DC		—
5	49	H	1 SDC		F
6	50	D	1 SDC		F
7	51	D	1 SDC 8x		F
8	52	Sm	1 SDC		M
9	53	Sm	1 NC		M
60	354	O	1 NC		F

737-45014

- 39

- 38

- 37

- 40

- 41

43

- 47

- 44

- 46

- 48

767-47103

- 49

737-45016

- 50

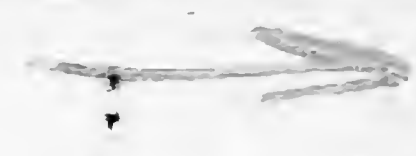
- 51

737 - 45086

- 52

- 53

-



RFB

0	355	M	1E	M
1	365		1SDC (9x)	F
2	370		1E	
3	38	M	1MC (10x)	M
4	39	D	1E	F
5	60	S	1MC (11x)	M
6	61	D	1SDC	M
7	62	S	1SDC	F
8	63	S	1SDC	M
9	364	S	1SDC	M
10	65	D	1E	F
11	66	H	1MC (12x)	F
12	67	D H.	1MC (13x)	F
13	68	D	1E	F
14	69	S	1SDC (14x)	F
15	70	S	R	M
16	71	D	1SDC	M
17	72	S	1MC (15x)	F
18	73	S	1SDC	M
19	374	D	1E	F

- 55

737-45029

—

- 57

737-45008 - ~~54~~

56

- 59

- 58

- 60

- 61

- 62

- 63

- 64

- 65

- 66

- 67

- 68

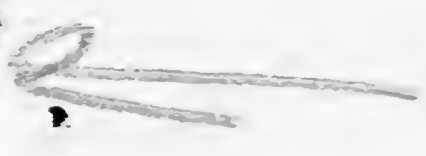
- 69

- 70

71

20x $\frac{16x}{17x}$ I no parents died \rightarrow

81 375 D	1E	-
2 78 D	1E	M
378 H	INC	M
478 S	INC	F
5 79 S	1E	M
6 80 H	ISDC	
7 81 S	1E	M
8 82 S	ISDC	F
9 83 D	ISDC	F
9.0384 H	ISDC	F
1 85 S	ISDC	M
2 86 S	R	Sub A
3 87 D	R	Sub A
4 88 H	1E	M
5 89 D	ISDC ^{17x}	F
6 90 H	1E	-
7 91 S	1E	F
8 92 D	1E	M
9 93 S	ISDC ^{18x}	F
100394 H	1MC ^{19x}	F



-72

-73

-75

-74

-79

-76

-77

-78

-80

-81

-82

-83

-84

-85

~~-86~~ Pred

-87

-86

-88

-89

-90

INT

101 39⁺
51 sm

2 96 am

3 97 d

4 98 d

5 99 sm

6 400 D

7 01 S

8 02 D

9 03 S

110 40³
~~47~~ S

1 D

2 S

3 D

4 S

5 H

6 S

7 H

8 S

9 S

120 4¹³
~~47~~ D

BP

r
R

r

r

R

T

T

B

r

T

T

B

T

R

R

T

B

B

R

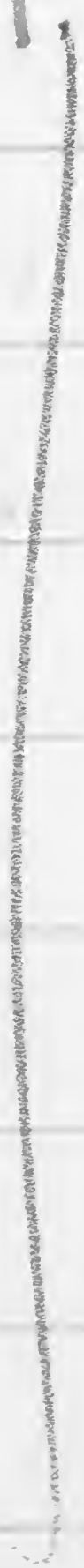
R

P
in

↑

R

in

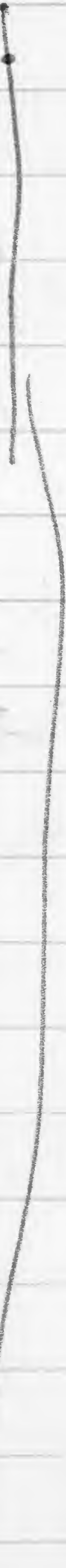


5

		ST	BP	P.
121	15	Sm	T	w
2	16	H	B	
3	17	Sm	T	
4	18	D	R	
5	19	Sm	R	
6	20	Sm	T	
7	21	H	T	
8	22	H	T	
9	23	D	T	
130	42	Sm	T	
1	25	Sm	B	
2	26	D	r	
3	27	H	T	
4	28	Sm	T	
5	29	Sm	R	
6	30	Sm	R	
7	31	H	None	
8	32	Sm	r	
9	33	D	R	
140	43	Sm	B	
141	43	Sm	B	

R

~



Great Frigate

Sep
M

141 34 S

R

2 36 H 5

M

3 37 O 6

M

4 38 S 7

M

5 39 D (8)

SUB ~~AD~~

6 40 D 9

M

7 41 S 10

M

8 42 H / 11

M

9 43 S (12)

SUB ~~AD~~

150 44 D / 443

M

1 45 D 4

M

2 46 H 5

M

3 47 S 6

M

4 48 S 7

M

5 49 D 8

M

6 50 S (13) (49)

F

7 51 H 50

M

8 52 D

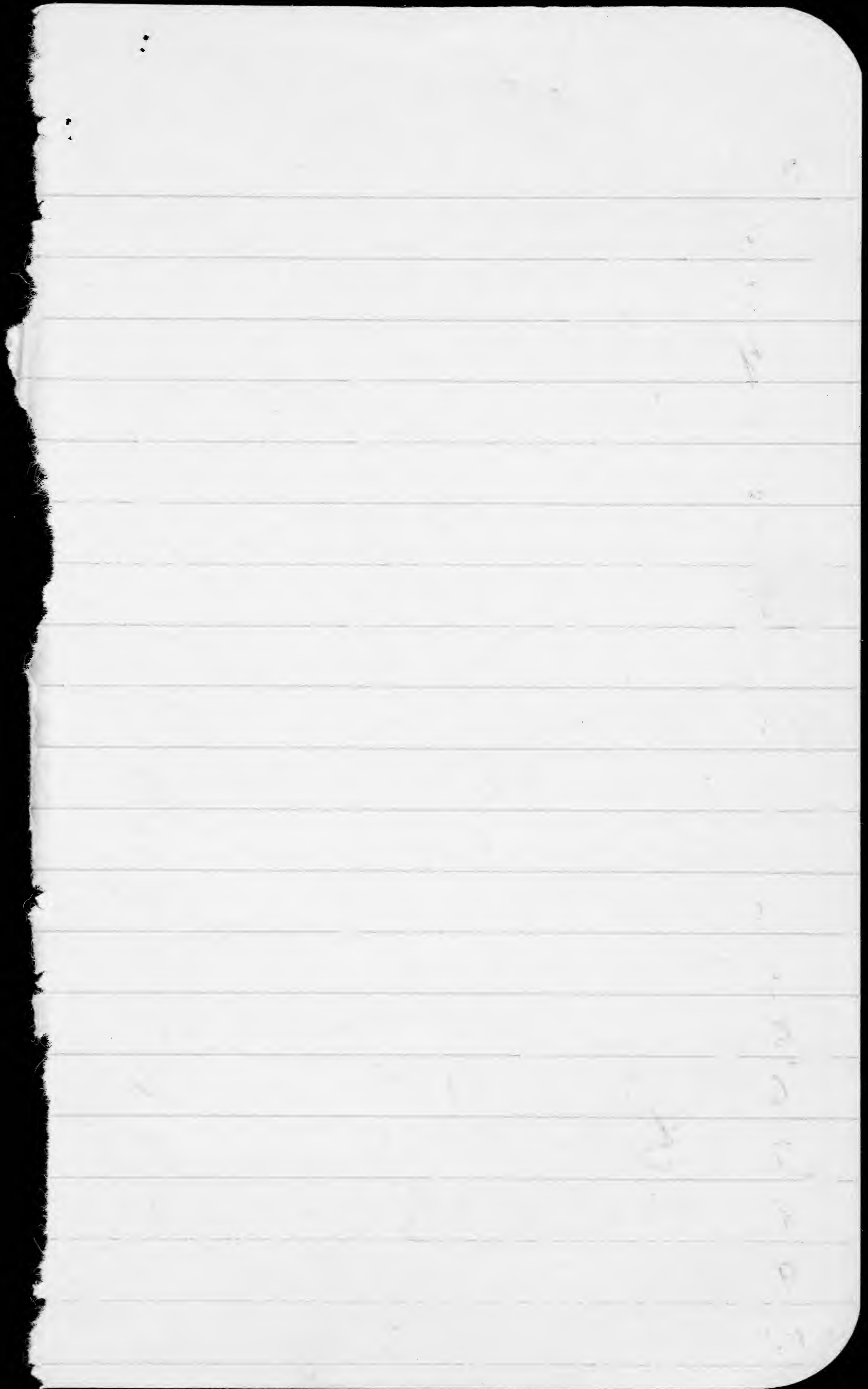
M

9 53 S

M

140 54 D 453

M



Bladder

181

2

3

4

5

6

7

8

9

190

1455

1 LDC

M

2 565

1 SDC

M

3 576

1 MDC

M

4 587

F

5 598

1 MDC

M

6 609

1 SDC

A F

7 620

1 E

A F

8 631

1 SDC

M

9 642

1 E

M

000 466

BB

3

2 E

M

Species



Brown Boobies

} Pair



- 96

- 97

95

94

- 93

- 92

- 91

- 45

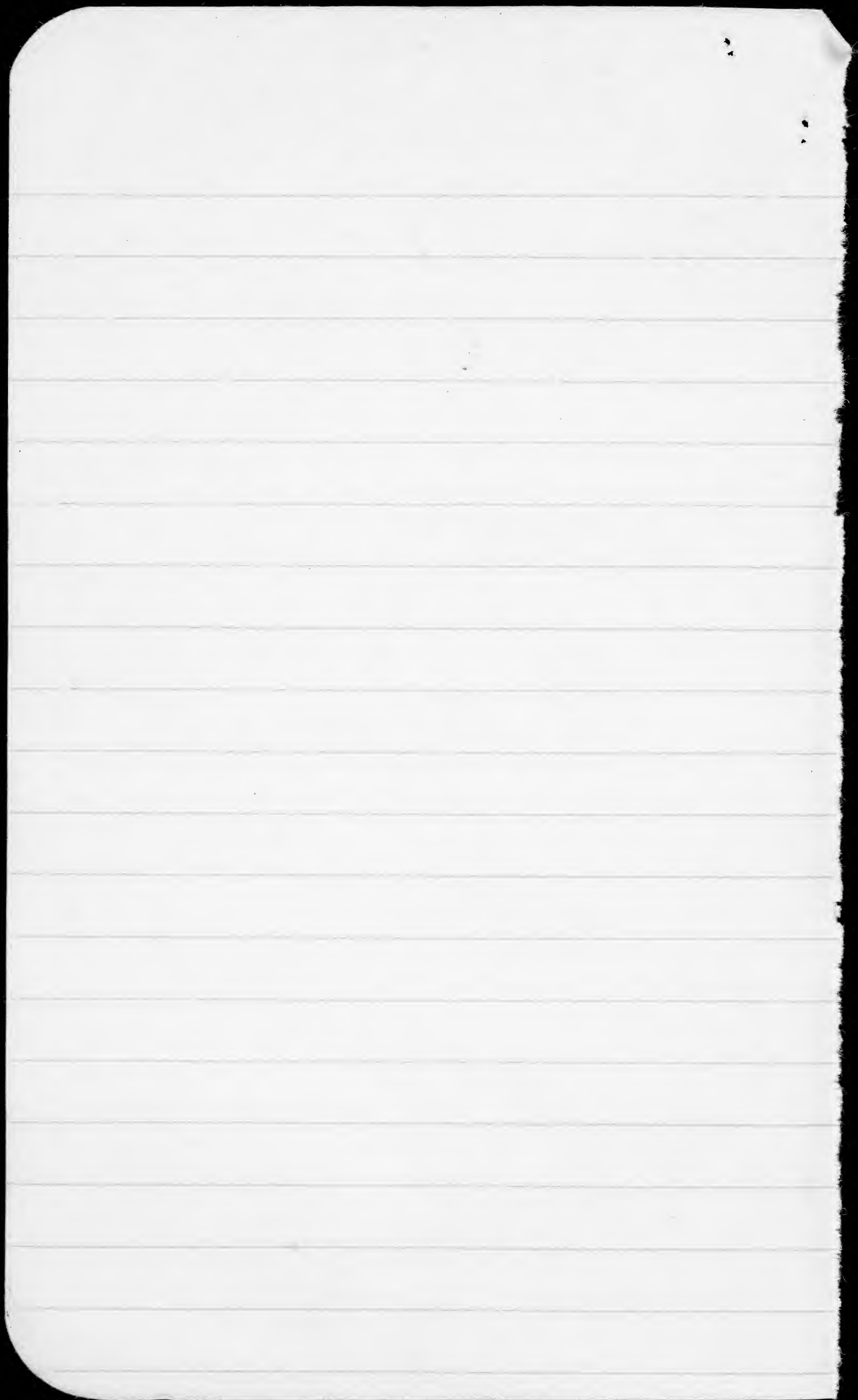
- 42

- 22

X,

ST returns

773-00245 R



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

BFB

737-44162 ♀ Route

737-45093 ✓

45060 ✓ IE

45070 ✓ 7 Roosters

45096

737 - 44175 ✓

45067 ✓ F-1E

45087 ✓ -F-15DC

45081 ✓ F 15DC

45078 ✓ F 1E

587-80380 R-1 ✓

767 53301

1 NC 24

2 IE

3 IE

4 ADC

5 IE

6 1SDC

7 INC

8 IE

9 ~~INC~~ 1SDC

10 INC

1 IMC

2 ISC

3 INC

4 IR

5 IE

6 SDC } P

7 SDC } P

8 IE

9 IE

10 MDC

21 SDC

2 MC

3 } Boosting
4 }
5 }

6 INC

7 JMA

8 Boosting

9 SDC

30 MDC - M

1 SDC - M

2 SDC - F

3 IE - F

4 INC FM

5 IE FM

6 Boosting FF

7 INC F

8 ISDC M

9 ISDC M

40 ISDC - M

737-4462

41	1 MTC	M
2	1 NC	M
3	1 NC	F
4	1 NC	F
5	Roosting	M
6	1 NC	F
7	1 MDC	F
8	1 E	M
9	1 NC	F
50	1 MDC	F
1	Roosting	M
2	1 MC	M
3	1 SDC	F
4	1 SDC	M
5	1 MDC	M
6	1 MDC	M
7	1 E	F
8	1 MDC	M
9	Roosting	F
60	1 MDC	M

~~587-80380-R~~

61	Roosting	M
2	"	F
3	"	M
4	LE - F	
5	1 MDC - F	
6	1 MDC - F	
7	1 MDC - M	
8	1 NC - F	
9	1 MDC - M	
70	1 NC	F
1	Roosting	F
2	"	M
3	1 MDC	F
4		
5	1 SDC	F
6	1 NC	F
7	1 MDC	F
8	Roosting	M
9	Roosting	M
80	1 NC	F

81	1E	M	
2	1E	F	
3	1E	F	
4	1NC	F	
5	1NC	F	
6			
7	Roosting	Female	
8	1NC	F	
9	1SOC	F	
90	1SPC	F	
91	1SPC	F	
92	1NC	F	
93	1NC	M	
94	1E	M F	
95	1NC	F	
96	Roosting	Sub	
7	1NC	F	
8	1MOC	F	
9	1SOC	M	
400	1E	M	53400

