

APPENDIX 1

**SOUTH WILMINGTON BOULEVARD
KING STREET TO 4TH AND WALNUT STREET
HISTORICAL DATA**

APPENDIX 1

Table 1. Population of Wilmington 1739-1920
 (from Scharf 1888:643; Hoffecker 1972:6;
 Munroe 1978:269)

<u>Year</u>	<u>Population</u>	<u>% Change</u>
1739	610	-
1770	1,230	+ 101.6
1790	2,355	+ 89.8
1800	3,241	+ 38.8
1810	4,416	+ 36.3
1820	5,268	+ 19.3
1830	6,628	+ 25.8
1840	8,367	+ 26.2
1850	13,979	+ 67.1
1860	21,258	+ 52.1
1870	30,841	+ 45.1
1880	42,499	+ 37.8
1890	61,431	+ 44.5
1900	76,508	+ 24.5
1910	87,411	+ 14.3
1920	110,168	+ 26.0

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Table 2. Occupations of Individuals Residing in Project Area, 1814 (from Wilmington City Directory 1814)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Revenue service	3
Cooper	2
Spinster	2
Shoemaker	4
Fisherman	1
Chairmaker	1
Carter	3
Trader	1
Machine maker	1
Tabacconist	1
Huckster	3
Nurse	3
Ship captain	7
U.S. Army officer	1
Laborer	12
School teacher	1
Milliner	1
Waterman	2
Merchant	1
Grocer	2
Confectioner	1
Butcher	1
Bellman	1
Tailor	3
Coachmaker	1
Carman	2
Hatter	1
Conveyancer & surveyor	1
Carpenter	3
Plaisterer	1
Gentlewoman	2
Physician	1
Minister	2
Starch manufacturer	1
Tin plate worker	1
Blacksmith	1
Tailoress	1
Seamstress	1
Total: 38 occupations	77

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Table 3. Occupations of Individuals Residing in Project Area, 1845 (from Wilmington City Directory 1845)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Cordwainer	9
Waterman	12
Cabinet maker	1
Grocer	7 (1)*
Tobacconist	2
Laborer	17
Dry goods	1
Carter	7
Boardinghouse keeper	2
Widow	7
Tin plate worker	2
Sailmaker	1
Blacksmith	5
Carpenter	5 (1)*
Cooper	3
Wood corder	1
Wheelwright	4
Engineer	2
Machinist	1
Ship carpenter	9
Bricklayer	2
Victualler	2
Ship's engineer	1
Stonemason	1
U.S.R.S.	1
Constable	1
Huckster	1
Carpet weaver	1
Iron founder	1
Harness maker	1
Chimney sweep	1
Coachmaker	2
Tailor	2
Gardner	1
Hatter	2
Flour inspector	1
Currier	1
Conductor	1
Livery stable	1
Total: 39 Occupations	118

*shop or business only, run by non-resident of project area
(numbers not included in total)

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Table 4. Occupations of Individuals Residing in Project Area, 1853 (from Wilmington City Directory, 1853)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Cordwainer	10
Teacher	2
Carpenter	10 (1)*
Machinist	5
Car builder	1
Widow	16
Laborer	18
Blacksmith	6
Engineer	3
Coffee roaster	2
Coach manufacturer	2
Coach maker	4
Conductor	2
Coach trimmer	1
Sail maker	1
Ship carpenter	3
Cooper	3
Cabinet maker	1
Hatter	1
Carter/driver	6
Bishop	1
Ship captain	2
Brakeman	1
Farmer	1
Ship joiner	2
Variety store keeper	1
Spring maker	1
Waterman	5
Tanner	1
Printer	2
Painter	6
Ship smith	1
Dentist	1
Livery stable	3 (1)*
Letter carrier	1
Pattern maker	1
Patent leather finisher	1
Tailoress	2
Iron merchant	1
Minister	1
Grocer	1
Dressmaker	1

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Table 4. (cont'd.)

Wood agent	1
Bricklayer	1
Tailor	3
Boilermaker	1
Tobacconist	2
Sawyer	1
Milliner	1
Leecher & cupper	1
Huckster	1
Wheelwright	2
Baker	1
Oysterman	1
Moulder	1
Agent & broker	1
Dyer	1
Tin plate worker	<u>1</u>
Total: 58 occupations	149

* shop or business only, run by non-resident of project area
(numbers not included in total)

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Table 5. Occupations of Individuals Residing in Project Area, 1862, (from Wilmington City Directory, 1862)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Hotel proprietor	3
Grocer	2
Minister	1
Coachtrimmer	1
Cooper	1*
Coach manufacturer	5 (3)*
Real estate agent & auctioneer	1
Meeting hall	1*
Ambrotypist	1
Clothing	1
Moulder	1
Car builder	2
Saloon keeper	3
Carter	5
Morrocodresser	3
Baker	2
Gunsmith	1
Machinist	4
Ship carpenter	8
Carpenter	1
Cabinet maker	1
Shoemaker	4
Shoe dealer	1
Measurer of lumber	1
Barkeeper/tender	1
Army officer	2
Restauranteur	1
Housekeeper	1
Laborer	12
Wheelwright	3 (1)
Engineer	1
Clerk	2
Widow	5
Express agent	2
Blacksmith	4 (2)*
Trunkmaker	2
Currier	1
Tailor	1
Agent	1
Huckster	1
Painter	3

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Table 5. (cont'd.)

Brakeman	1
Candy store keeper	1
Shoebinder	1
Boilermaker	1
Brassfinisher	1
Boot & shoe manufacturer	
and dealer	1*
Waterman	2
Public school	1*
Livery stable	1
Seamstress	1
Druggist	1
Trimmings shop	8*
Coachmaker	1
Bookbinder & paperhanger	1
Hostler	1
Diary shop	1
Coffee roaster	<u>2</u>
Total: 54 occupations	106

* shop or business only, run by non-resident of project area
(numbers not included in total)

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Table 6. Occupations of Individuals Residing in Project Area, 1872 (from Wilmington City Directory, 1872)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Clerk	8
Baker	6
Carter	4
Bricklayer	5
Carpenter	8 (1)*
Hotel proprietor	2
Bartender	1
Carriage builder	4*
Grocer	5
Coachmaker	3
Machinist	3
Boardinghouse keeper	5
Public school	1*
Widow	12
Cigarmaker	1
Ship carpenter	4
Carriage trimmer	2
Wheelwright	2
Saloon	5 (1)*
Chairmaker	1
Moulder	3
Flour & feed dealer	1
Dressmaker	3
Restaurateur	1
Laborer	22
Boot & shoe dealer	3 (1)*
Harnessmaker	2
Trimmings & varieties shop keeper	4
Cabinetmaker	2
Blacksmith	3 (1)*
Tanner	2
Brakeman	1
Butcher	2
Teacher	1
Morocco manufacturer	1
Currier	1
Fisherman	1
Plumber	1
Painter	3
Shoemaker	3
Operator	1

Table 6. (cont'd.)

Plasterer	1
Boilermaker	3
Wire & liquor storekeeper	1
Cabinetmaker & undertaker	1*
Ship joiner	2
Broom maker	1
Detective	1
Glazier	1
Policeman	1
Barber	3
Fireman	1
Livery stable	1
Carting/hauling business owner	1
Seamstress	1
Bookkeeper	1
Telegraph operator	1
Baggage master	1
Conductor	1
Tailoress	1
Mouroccodresser	1
Paperhanger	1
Junk dealer	1
Total: 61 occupations	<u>160</u>

* shop or business only, run by non-resident of project area
(numbers not included in total)

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Table 7. Occupations of Individuals Residing in Project Area, 1881 (from Wilmington City Directory, 1881)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Public school	1*
Brakeman	4
Machinist	15
Minister	1
Carriage trimmer	2
Baker	4
Clerk	4
Hotel proprietors	4
Grocers	5 (2)*
Telegraph operator	1
Blacksmith	5
Salesman/woman	3
Saloon keeper	6
Bristles	1
Moulder	3
Wagon builders	1*
Carriage manufactory	5*
Tanner	4
Dry goods	1
Painter	7
Cigar & tobacco shopkeeper	4
Druggist	1
Hostler	1
Laborer	20
Pattern maker	1
Widow	7
Letter carrier	1
Conductor	2
Finisher	2
Ship carpenter	1
Station agent	1
Carter	1
Tinsmith	3
Morrocodresser	3
Shoemaker	2
Bodymaker	2
Butcher	2
Shipwright	1
Carbuilder	7
Merchant tailor	1*
Teacher	3
Carpenter	5
Boot & shoe dealer	3

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Table 7. (cont'd.)

Trimming storekeeper	1
School principal	1
Watchman	1
Tinner	1
Cigarmaker	1
Fish dealer	1*
Broom maker	1*
Silver plater	1*
Colorsman	1
Harnessmaker	2
Bricklayer	1
Brickmaker	1
Waterman	1
Varieties storekeeper	2
Tool keeper	1
Mill helper	1
Dog catcher	1
Policeman	1
Livery stable keeper	1
Beamsman	1
Dredging company owner	1
Second-hand store keeper	1
Fireman	2
Mail agent, newspaper	1
Foreman	1
Wheelwright	1
Carting/hauling business	1*
Barber	2
Confectionery	1
Boilermaker	1
Plumber	1
Assistant depot master	1
Coppersmith	1
Milk dealer	1
Metal forger	1
Putter out	1
Police sergeant	1
House furnishing storekeeper	1

Total: 73 occupations 177

* shop or business only, run by non-resident of project area
(numbers not included in total)

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Table 8. Occupations of Individuals Residing in Project Area, 1890 (from Wilmington City Directory, 1890)

<u>Occupation Title</u>	<u>No. of Individuals</u>
Hotel proprietor	2
Butcher	3
Clerk	9
Machinist	9
Physician	2*
Wagon builder	2 (1)*
Carriage manufactory	2*
Watchmaker	1
Furniture dealer	1*
Coal & flour dealer	1*
Cigar & tobacco shopkeeper	6
Ship joiner	1
Salesman	2
Flour, feed & grain merchant	2
Grocer	6
Collarmaker	1
Upholsterer	2
Stairbuilder	1
Cabinetmaker	3
Fireman	3
Boilermaker	4
Insurance agent	1
Steward	1
Watchman	2
Ship carpenter	3
Locksmith	1
Foreman	2
Dressmaker	4
Tinsmith	2
Carpenter	7
Laborer	18
Driver	1
Brakeman	2
Musician	1
Shoemaker	4
Blacksmith	4 (1)*
Woodworker	1
Waterman	1
Mate	1
Teacher	2
Laundry	2
Employee	3
Shoe storekeeper	3
School principal	1

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Table 8. (cont'd.)

Moulder	2
Boot & shoe dealer	1
Widow	13
Commission merchant	3*
Grinder	1
Inspector	1
Silver plater	1*
Oyster dealer	1
Wholesale grocer	1*
Confectioner	2 (1)*
Barber	2*
Clothing	1
Milk dealer	2
Livery stable keeper	4
Fruit dealer	1
Wine & liquor store keeper	1
Beamsman	1
Saloon	2
Bartender	3
Morrocodresser	6
Dressmaker	1
Restaurant	2 (1)*
Bookkeeper	1
Painter	5
Tailor	3
Plumber	1
Pattern cutter	1
Jeweler	1
Cooper & galvanized iron smithing	1*
Fishmonger	1
Helper	2
Oiler	1
Sorter	1
Shipwright	1
Carting business	1*
Printer & publisher	1*
Bridge & wharf builder	1*
Lawyer	1
Lumber dealer	1*
Bodymaker	2
Morroco finisher	1
Engineer	1
Flagman	1
Coppersmith	1
Draughtsman	1
Coachmaker	1

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Table 8. (cont'd.)

	Bridgetender	1
	Boardinghouse keeper	2
	Caulker	1
	Conductor	2
	Gunsmith	1
	Car cleaner	2
	Public school	<u>1*</u>
Total	82 occupations	200

* shop or business only, run by non-resident of project area
(numbers not included in total)

APPENDIX 2

**SOUTH WILMINGTON BOULEVARD
KING STREET TO 4TH AND WALNUT STREET
GENERAL ARTIFACT INVENTORY**

APPENDIX 2
GENERAL ARTIFACT INVENTORY

ARTIFACT TOTALS
(Excluding Faunal Material)

Glass:

Minimum vessel count	787
Bases	419
Neck, rim & lip	481
Sherd number	<u>11,776</u>
Total	13,463

Ceramics:

Minimum vessel count	971
Sherd number	<u>4,470</u>
Total	5,441

Metal:

Total	2,174
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Miscellaneous:

Total	933
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Flora & Dietary (excluding bone)

Total	309
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Pipes:

Total	56
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APPENDIX 2
Table 1
Provenience Catalog List

Wilmington Blvd.: 81/21

<u>Provenience #</u>	<u>Provenience</u>			
001	Block 1191	Lot 4-5-8	Trench 5 Backdirt	
002	" "	"	Trench 5 & 7 Backdirt	
003 (no artifacts)	" "	Lot 6-7	Trench 7 Backdirt	
004	" "	Lot 8	Trench 6 Backdirt	
005 (no artifacts)	" "	Lot 8	Trench 8 Backdirt	
006	" "	Lot 10	Trench 9 Backdirt	
007	" "	"	Trench 1, SQ 1, Level A	
008	" "	"	"	" Level B
009	" "	"	"	" Level C
010	" "	"	"	" Level D
011	" "	"	"	" Level E
012 (no artifacts)	" "	"	"	" Level F
013	" "	"	Trench 2,	" Level G
014	" "	"	"	" Level I
015	" "	"	"	" Level J
016 & 017	" "	"	Trench 3, SQ 1 Level A & B mixed	
018	" "	"	Trench 4, SQ 1 Level C	
019 Deleted				
020	Block 1192	Lot 18-19	Feature 1	General
021-043	Not used due to clerical error			
044	Block 1184	Lot 7	Feature 1	General
045	" "	Lot 13	Feature 1	General

APPENDIX 2

General Artifact Inventory and Provenience Catalog List

Wilmington Blvd.: 81/21

<u>Provenience #</u>	<u>Provenience</u>				
046	Block 1184	Lot 58			Looter's Pit 1
047	"	"	"		Looter's Pit 2
048	"	"	"		Looter's Pit 3
049	"	"	Lot 58A	Square 1	Level A
050	"	"	"	"	Level B
051	"	"	"	"	Level C
052	"	"	"	"	Level D
053	"	"	"	Square 2	Level A
054	"	"	"	"	Level B
055	"	"	"	Square 3	Level A
056 (no artifacts)	"	"	Lot 58B	Square 1	Level A
057	"	"	Lot 58C	Square 1	Level A
058	"	"	"	"	Level B
059	"	"	"	"	Fea. 1
060	"	"	"	Square 2	Level A
061	"	"	"	"	Level B
062	"	"	"	"	Level B'
063	"	"	"	"	Level C
064	"	"	"	"	Level D
065	"	"	Lot 58B	Test Pit 1	
066	"	"	"	Test Pit 2	
067	"	"	Lot 58B-C	Test Pit 3	

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General Artifact Inventory and Provenience Catalog List

Wilmington Blvd.: 81/21

<u>Provenience #</u>	<u>Provenience</u>			
068	Block 1184	Lot 58C		Test Pit 4
069	" "	"		Test Pit 5
070	Block 1183	Lot 55		Feature 1 General
071	" "	Lot 47		Looters' Discards
072	Block 1184	Lot 58A		Square 2 Fea. 2
073	" "	"		Brick Floor Fea. 1
074	" "	"		Backdirt
075	Block 1192	Trench 1		0-7'
076	" "	"		7-14'
077	" "	"		14-21'
078 (not used)	" "	"		20-30'
079	" "	"		21-28'
080	" "	"		28-35'
081	" "	"		35-42'
082	" "	"		42-49'
083	" "	"		49-56'
084	" "	"		56-63'
085	" "	"		63-70'
086 (no artifacts)	" "	"		70-77'
087	" "	Barrel Privy		77-84'
088	" "	Trench 1		84-91'
089	" "	"		91-99'
090	" "	"		99-106'

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General Artifact Inventory and Provenience Catalog List

Wilmington Blvd.: 81/21

<u>Provenience #</u>	<u>Provenience</u>			
091	Block 1192	Trench 1	106-113'	
092	" "	"	113-120'	
093 (not used)	" "	"	120-121'	
094	" "	"	Barrel Privy	Feature 1 Level A
095	" "	"		Level B
096	" "	"		Level C
097	" "	"		Level D
098	" "	Trench 1 in situ	Trench West Wall 10'-20'	
099	" "	Backdirt	20'-30'	
100 (no artifacts)	" "	Backdirt	20'-30'	
101	" "	6' from south end of Trench 1 Backdirt		
102	" "	Trench 1	120'-127'	
103 (not used)				
104	" "	Lot 18-10 Feature 1	Backdirt	
105	" "	Lot 32	Demolition Finds	

APPENDIX 2
 Table 2
 Artifact Types Found at Each Provenience Number Location

		<u>Artifact Types</u>						
<u>Provenience #</u>	<u>Block #</u>	Ceramic	Glass	Pipe	Metal	Flora & Dietary	Fauna	Miscellaneous
Wilmington Blvd.: 81/21								
001	1191	✓	✓		✓			✓
002	"	✓					✓	✓
003 (no artifacts)	"							
004	"	✓	✓		✓			✓
005 (no artifacts)	"							
006	"		✓					
007	"	✓					✓	
008	"	✓			✓		✓	✓
009	"	✓	✓		✓		✓	
010	"	✓	✓		✓		✓	
011	"	✓	✓	✓	✓	✓	✓	
012 (no artifacts)	"							
013	"		✓		✓			
014	"	✓						
015	"	✓						
016 & 017	"	✓	✓		✓	✓	✓	✓
018	"	✓			✓			
019 Deleted								

APPENDIX 2

Artifact Types Found at Each Provenience Number Location

		<u>Artifact Types</u>						
<u>Provenience #</u>	<u>Block #</u>	<u>Ceramic</u>	<u>Glass</u>	<u>Pipe</u>	<u>Metal</u>	<u>Flora & Dietary</u>	<u>Fauna</u>	<u>Miscellaneous</u>
Wilmington Blvd.: 81/21								
020	1192	✓	✓	✓	✓	✓	✓	✓
021-043	Not used due to clerical error							
044	1184	✓	✓	✓	✓	✓	✓	✓
045	"	✓	✓	✓	✓	✓	✓	✓
046	"	✓	✓	✓	✓	✓	✓	✓
047	"	✓	✓	✓	✓		✓	✓
048	"	✓	✓		✓		✓	✓
049	"		✓		✓			
050	"	✓	✓		✓	✓	✓	✓
051	"	✓	✓		✓			
052	"	✓	✓		✓		✓	✓
053	"	✓	✓		✓		✓	✓
054	"	✓	✓	✓	✓		✓	✓
055	"	✓	✓	✓	✓	✓	✓	✓
056	"						✓	
057	"	✓			✓	✓	✓	✓
058	"				✓	✓	✓	✓

APPENDIX 2

Artifact Types Found at Each Provenience Number Location

Artifact Types

Wilmington Blvd.: 81/21		<u>Artifact Types</u>						
<u>Provenience #</u>	<u>Block #</u>	Ceramic	Glass	Pipe	Metal	Flora & Dietary	Fauna	Miscellaneous
059	1184	✓		✓	✓	✓		
060	"	✓	✓		✓	✓	✓	✓
061	"	✓	✓	✓	✓	✓	✓	✓
062	"	✓	✓		✓			✓
063	"	✓	✓		✓			✓
064	"	✓				✓		
065	"				✓	✓		
066	"	✓						
067	"	✓			✓	✓		
068	"	✓			✓	✓	✓	
069	"	✓						
070	1183	✓	✓		✓	✓	✓	✓
071	"	✓						
072	1184	✓	✓		✓			✓
073	"	✓	✓	✓	✓			✓
074	"	✓						
075	1192	✓	✓					
076	"	✓						

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Artifact Types Found at Each Provenience Number Location

		<u>Artifact Types</u>						
<u>Provenience #</u>	<u>Block #</u>	Ceramic	Glass	Pipe	Metal	Flora & Dietary	Fauna	Miscellaneous
Wilmington Blvd.: 81/21								
077	1192	✓	✓		✓	✓	✓	
078 (not used)	"							
079	"	✓	✓		✓	✓	✓	
080	"	✓	✓		✓	✓	✓	✓
081	"	✓	✓					
082	"	✓	✓					
083	"	✓	✓					
084	"		✓				✓	✓
085	"	✓	✓					
086 (no artifacts)	"							
087	"	✓	✓		✓	✓	✓	✓
088	"	✓	✓		✓			
089	"	✓	✓					
090	"						✓	
091	"	✓	✓					
092	"	✓	✓					
093 (not used)	"							

APPENDIX 2

Artifact Types Found at Each Provenience Number Location

Artifact Types

Wilmington Blvd.: 81/21		<u>Artifact Types</u>						
<u>Provenience #</u>	<u>Block #</u>	Ceramic	Glass	Pipe	Metal	Flora & Dietary	Fauna	Miscellaneous
094	1192	✓	✓		✓			
095	"	✓	✓					
096	"	✓			✓			
097	"	✓						
098	"	✓						
099	"	✓	✓		✓	✓		
100	"						✓	
101	"	✓	✓					
102	"	✓	✓		✓		✓	
103 (not used)								
104	"	✓	✓					
105	"	✓	✓		✓			

Note: For an example, only the first pages of Appendix 2 - Tables 3, 4, 5, 6, 7, 8 & 9 are attached. If you would like a copy of the complete artifact inventory please contact the Division of Highways.

APPENDIX 2
Table 3
Ceramic Sherd Count

Provenience Numbers

Ware	001	002	003	004	005	006	007	008	009	010	011	012	013	014	TOTAL
Delft				1											1
White Salt Glaze Stonewr															-
Creamware															-
Pearlware		2									23				25
Whiteware	6	6		15				3	49	9	147			1	236
Ironstone									11						11
Porcelain	2	4							4		6				16
Redware	3	3		2			1		22		61			12	104
Slipware	1								12		14				27
Staffordshire Slip															-
Refined Redware															-
Yellowware	2	1							16		2				21
Stoneware	1			6				1	31	4	4				47
Rockingham															-
Lusterware											1				1
Sgraffito															-
Earthenware															-
Buff Earthenware															-
Black Basalt															-
Miscellaneous		2													2
Total	15	18	-	24	-	-	1	4	145	13	258	-	-	13	491

APPENDIX 2

Table 4

Ceramics Minimum Vessels

Creamware, Pearlware, Whiteware, Ironstone

Provenience No. 81/21-001 BLK 1191 LOT 4-5-8 TRENCH 5

Decorative Type	Bowl	Cup	Plate	Saucer*	Mug	Platter	Serving Vessel	Pitcher	Creamer	Teapot	Lid	Chamber Pot	Other	Total
Undecorated	1		2											3
Edged														
Sponged														
Dipped														
Banded														
Mocha														
Cable														
Colored														
Lined														
Painted														
Willow														
Printed			1											1
Ironstone														
Total	1		3											4

* \leq 160 mm Diameter

APPENDIX 2
GENERAL ARTIFACT INVENTORY

Ceramics Minimum Vessels

81/21-001

Provenience No: BLK. 1191 LOT 4-5-8 TRENCH 5 Porcelain

Dec.	Bowl	Cup	Plate	Saucer*	Mug	Platter	Serving Vessels	Pitcher	Creamer	Teapot	Lid	Camber Pot	Other	Total
Undecorated													1	1
Edged														
Sponged														
Dipped														
Banded	1													1
Mocha														
Cable														
Colored														
Lined														
Painted														
Willow														
Printed														
Total	1												1	2

* \leq 160 mm in Diameter

APPENDIX 2
GENERAL ARTIFACT INVENTORY

Minimum Vessels

Other Ceramics

Provenience No. 81/21-001

BLK. 1191 LOT 4-S-8, TRENCH 5

Type	Flower Pot	Cup	Chamber Pot	Storage Vessel	Milk Pan	Pitcher	Bowl	Shallow Dish	Pie Plate	Plate	Teapot	Lid	Jug	Ink Bottle	Creamer	Mug	Porringer	Other	Total
Redware	1						1												2
Slipware									1										1
Staffordshire Slip																			
Refined Redware																			
Yellowware							1												1
Rockingham																			
Stoneware							1												1
Total	1						3		1										5

225

APPENDIX 2
Table 5
Glass

Provenience No.: 001		Min. Vessl.	Bases	Neck Rim Lip	Sherd #
Window Glass:					1
Food Storage:	Canning				
	Condiments				
	Other				
Tableware:	Tumblers				
	Stemmed				
	Serving Vessels				
	Other				
Household:	Lighting				
	Decorative				
	Other				2
Pharmaceutical:	Containers	1			
	Misc. Frags.				
Beverage Contnr:	Clear				
	Black/Brown				
	Amber				
	Aqua				
	Green				
	Other				
	Misc. Frags.				
Miscellaneous					1
<u>Total</u>		1	-	-	4

APPENDIX 2

General Artifact Inventory
Metal - Sheet 1

Provenience Nos.

Category	020	044	045	046	047	048	049	051	052
Architecture									
Nails:									
Hand wrought		1							
Wire	3	51	77		19	5	1	1	
Cut	4	4	25	4	10				
Misc.			3						
Tacks			8						
Unidentifiable	2	216	517			19			
Other									
Screws		2	3						
Nuts, Bolts, Washer		1	12						
Spikes		2	3						
Staples			1						
Hardware:									
Hinges, Straps, Hsp.	1 ^A	1	9	1		1			
Braces, Brackets			2						
Other			2						
Door Furnishings	1	4	3						
Window Furnishings			1						
Pipe		2	2						
Sheet Metal									
Other			5	1 ^D					
Unidentifiable									
Clothing									
Pins: Straight									
Safety			1						
Decorative			1						
Other									
Buttons, Snaps, etc.	1		2						
Hooks			1						
Buckles	1 ^B	2	1						
Other									
Unidentifiable									
Tools:									
Craft	2 ^C								
Agricultural		1	2						
Mechanical		2	1						
Other		1							

- NOTES: A (020) Architecture, hardware, hinges - iron coat hook
 B (020) Clothing, buckles - brass plated suspender braces, F. Fields Brace (pat. 1869), three smaller buckles, each buckle patented 1855
 C (020) Tools, craft - iron scribe, iron chisel
 D (020) Architecture, hardware, other - iron hook

APPENDIX 2

General Artifact Inventory
Metal - Sheet 2

Category	Provenience Nos.									
	020	044	045	046	047	048	049	051	052	
Personal										
Coins:										
Identifiable										
Unidentifiable			6							
Jewelry		1								
Toys			3							
Hygenic			1							
Misc.										
Unidentifiable										
Other			1 ^F							
Cooking/Dining										
Eating Utensils:										
Knives			3							
Forks										
Spoons			8							
Cooking Utensils:										
Knives										
Forks										
Spoons										
Pans, Pots, etc.			1							
Kettles										
Other		2 ^E								
Storage										
Cans:										
Whole										
Fragments			3							
Jar Lids			10							
Bottle Caps			9							
Other										
Transportation										
Horse Furniture										
Wagon Furniture				1						
Auto Furniture			10							
Other										
Furniture										
Handles										
Hinges			2							
Castors			1							
Other										

NOTES: E (044) Cooking/Dining, other - can opener; cast iron stove cover
 F (045) Personal, other - pocket watch

APPENDIX 2
 General Artifact Inventory
Metal - Sheet 3

Category	Provenience Nos.								
	020	044	045	046	047	048	049	051	052
Household									
Interior:									
Keys			1						
Electrical		2	2						
Oil Lamps		2	3						
Other	1 ^I	1 ^G	1						
Exterior:									
Fencing			110						
Other									
Arms									
Firearm Furniture									
Shells, Bullets		1 ^H							
Other									
Other	2 ^J								
Wire					1				
Misc.	12	1							
Unidentifiable	2	20	8	7	14	2	2		1

- NOTES: G (044) Household, interior, other - radio or television tube
 H (044) Arms, bullet, shell - brass and lead, 32 cal. Smith & Wesson centerfire cartridge R-P32 S & W live.
 I (020) House hold, other - "Ronson" Queene Anne cigarette lighter (silver)
 J (020) Other - iron bent metal rim, brass stamped metal ornament plate.

APPENDIX 2
Table 7
Miscellaneous

Category	Provenience Nos.												
	001	002	004	008	016/ 017	020	029	030	031	044	045	046	047
Architecture:													
Wood													
Plastic													
Brick/ Mortar					6					8	12		1
Other	3			3	13					1	55		
Personal:													
Toys		1				10			1	22	33	1	
Hygiene	1					2				4	16		
Decorative										7	1		
Clothes										2	10		
Other											3		
Leather:													
Shoes						15				11	79		
Other						1				23	85		
Buttons:													
Bone										1			
Gutta Percha													
Plastic						2				1	38		
Porcelain	1					4				14	1		
Shell											6	1	1
Wood											9		
Other										3	5	1	
Household:													
Wood						1				6	2		
Plastic	1										3		
Other		1				3				3	12	3	
Electrical:	1		2								2		
Utility Pipe:		1			1							3	
Other:													
Wood						2					9		
Plastic					2	10					22		
Other			4			5	1	1			22		

APPENDIX 2

Table 8
Flora & Dietary (Excluding Bone)

Category	Provenience Nos.									Total
	011	016/ 017	020	044	045	046	050	055	057	
Shell:										
oyster		3	3	6	13		1	1	4	31
clam			3	1	18	1			1	24
crab					1					1
conch					1					1
Nuts:										
walnut					16					16
hickory				1						1
coconut			1		7					8
Seeds:										
peach	1			69	33					103
cherry	1			7	5					13

APPENDIX 2
Table 9
Pipes

<u>Key</u>	<u>Provenience Catalog #</u>	<u>Imprint</u>	<u>Date</u>
A.	020-0398	Stem, "33 Davidson (Glasgow)"	1863-1910
B.	020-0394	On stem, mark "206"	
C.	020-0395	Bowl, wreath with horse inside, design on back of bowl	
D.	020-0397	Bowl has brown glaze	
E.	020-0398	Briarwood bowl, hand carved	
F.	020-0399	Briarwood bowl, hand carved claw design	
G.	020-0415	Possible commemorative	
H.	044-0315	T. Davidson & Co. (Caledonian Pipe Works)	1863-1910
I.	045-0980	Ribbed design that extends halfway up bowl	
J.	045-0981	Ribbed design that extends halfway up bowl- Alternating dot and line design on stem	
K.	045-0982	Ribbed design that extends halfway up bowl- Alternating dot and line design on stem	
L.	045-0983	Ribbed design that extends halfway up bowl- Alternating dot and line design on stem	
M.	045-0985	On stem - "Keyston" - "Philadelphia"	Post 1891
N.	045-0993	On stem - "Davidson, Glasgow" (T. Davidson & Co., Caledonian Pipe Works)	1863-1910

*Note: Key to decorations and/or marks noted on following three pages.

General Artifact Inventory
Pipes

Provenience & Catalog Nos.	Material					Decorating		Mark	Reed Pipe	Sherd #
	Stem	Bowl	Wood	Clay	Other	Diameter	Decorated			
011-0052	✓			✓		4/64				1
011-0110	✓			✓		4/64				1
020-0392	✓			✓		6/64			A	3
020-0393	✓			✓		7/64				1
020-0394	✓	✓		✓		6/64		✓	B	2
020-0395	✓	✓		✓		6/64	✓C			1
020-0396	✓	✓		✓		6/64		✓		1
020-0397	✓	✓		✓		6/64	✓D			1
020-0398		✓	✓				✓E			1
020-0399		✓	✓				✓F			1
020-0415	✓			✓		6/64	✓G			3
020-0416	✓			✓		5/64				1
020-0423				✓					✓	1
020-0435	✓				✓					1
044-0311	✓			✓		6/64				1
044-0312	✓			✓		6/64				3
044-0313	✓	✓		✓		6/64				1
044-0314		✓		✓			✓			1

APPENDIX 3
FAUNAL ANALYSES
AND
INTERPRETATION

by

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NATIONAL MUSEUM OF NATURAL HISTORY
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INTRODUCTION

A total of 1852 faunal elements recovered by the DELAWARE DEPARTMENT OF TRANSPORTATION excavations in the eastern segment of the South Wilmington Boulevard Project have been processed. This assemblage consists of: 1 shell fragment representing the Class Lamellibranchia 2 claw fragments representing the Class Crustacea, 138 bones representing the Class Osteichthyes, 2 carapace fragments representing the Class Reptilia, 199 bones of the Class Aves, and 1372 bones belonging to the Class Mammalia. The following is a report on the results of the faunal analysis of the Wilmington Boulevard assemblage.

Given the preliminary nature, Phase I and II, of the archaeological investigation of this area, the generally small amount of faunal material recovered from excavation units, and the mixed nature of some of the larger samples, few concrete statements concerning the diet of specific past inhabitants of this area can be made. Therefore, much of this report consists of a tabular presentation of the faunal remains and zoologically oriented explanatory notes. However, anthropologically oriented interpretations will be drawn for the larger faunal samples from the four privies excavated. In spite of recent mixing of these looted deposits, it is felt that their faunal contents represent a fairly finite, unmixed window in time and can, thus, be used to examine variation in meat consumption in the area during the second half of the nineteenth century. These statements are also provided here as a demonstration of the potential of such analyses for the understanding of patterns of socioeconomic variation in the recent past.

NOTES ON THE IDENTIFICATIONS PRESENTED IN TABLES 1, 2, AND 3

CLASS LAMELLIBRANCHIA

Only 1 shell fragment of a large unidentified bi-valve was recovered from the privy on Block 1183 Lot 55. The inclusion of this shell in the deposit may be accidental or may represent food debris.

CLASS CRUSTACEA

Two claw fragments of an unidentified species of crab were recovered from the Block 1183 Lot 55 privy. It is quite possible that these claws represent food debris.

CLASS OSTEICHTHYES

Fish bones recovered were derived primarily from privy deposits and were especially frequent in the Block 1183 Lot 55 privy. Bone-by-bone identification of these remains was not possible. However, it was possible to identify general families of fish represented in this assemblage. These families include: Ictaluridae (fresh-water catfish), Percidae (perch), Percichthyidae (bass), and Cyprinidae (carp). Each family includes common food species found in the area, which may have been purchased from retailers or caught by consumers directly.

CLASS REPTILIA

Two fragments of the carapace of an unidentified species of turtle were recovered from the privy on Block 1183 Lot 55 privy. The shape of these fragments suggests that these were not land tortoises. Inclusion of this material in the deposit may be accidental given the proximity of creeks and rivers. It may also represent food debris.

CLASS AVES

One hundred and ninety-nine bird bones were recovered and analyzed. The most commonly represented family of bird is Phasianidae, primarily the species Gallus gallus (domestic chicken). It is also likely that turkey (Meleagris gallopavo) is represented in this assemblage. Unfortunately, the bones of chickens and turkeys are morphologically almost indistinguishable from one another. Moreover, there is a considerable overlap in the size of these species, making the discrimination between a large rooster and a small turkey extremely difficult. Therefore, larger bones which might be either chicken or turkey are noted here as Gallus/Meleagris.

Much less commonly represented are waterfowl of the Family Anatidae. The most common waterfowl recovered are ducks (Anas sp.). These ducks may be domestic varieties of Anas platyrhynchos (Mallard) or Cairina moschata (Muscovy duck). These bones might also represent several varieties of wild duck found locally, including mallards and black duck (A. rubripes). Both domestic and wild varieties of duck may have been bought from retailers or raised, or hunted, by consumers. The other member of this family recovered is the goose, identified here as Anser anser (Domestic goose). The possibility that these bones belong to wild geese (ie. Branta canadensis) cannot be excluded, however. Again, there is an unfortunate similarity in the morphology of the bones of ducks and geese and an overlap in size. Material which may belong to either form is indicated by the identification Anas/Anser.

Represented by one bone each are the species Columba liviv (Domestic pidgeon) and Butorides virescens (Green heron). Both species occur locally and their inclusion in the faunal assemblage is probably accidental. This is especially so in the case of the heron, a small species found near ponds, marshes, and streams in the area.

Bones identified as Medium Bird could not be assigned to any specific taxonomic class due to the degree of fragmentation of the bone or the immature state of the bird. Most of this material is probably chicken, however.

CLASS MAMMALIA

ORDER MARSUPIALIS

One mandible belonging to an opossum (Didelphis marsupialis) was recovered from the Block 1183 Lot 55 privy. Opossum is a common inhabitant of settled areas, where it occupies a similar niche to that of the rat. The inclusion of opossum in this deposit may be the result of utilization by humans as food, but more likely is the result of its scavenging activities.

ORDER LAGOMORPHA

Rabbits are represented by only one bone identified as Syvilagus cf. floridanus (Eastern cottontail)., If rabbit was a food source, it was utilized only occasionally. The inclusion of this bone in the sample may also be accidental.

ORDER RODENTIAL

The most common member of this order in the Wilmington Boulevard assemblage is the musk rat (Ondatra zibethicus). Musk rat, like the green heron, is an inhabitant of marshes and the banks of streams and rivers. It is often found near or within human settlements. The frequency with which this species is represented here suggests that the deposition of its bones was not accidental. It is likely that musk rates were utilized for both pelts and meat.

The order rodent identified belongs to the genuy Rattus. Inclusion of rate in this sample is probably not the result of utilization of this animal as food.

ORDER CARNIVORA

Carnivores are represented in the assemblage by the species Felis catus (Domestic cat). These bones include both mature and immature individuals. The agency of their inclusion in the assemblage is probably similar to that of the opossum and the rates. Kittens may have been intentionally thrown into privies as a means of disposing of unwanted cats.

ORDER ARTIODACTYLA

FAMILY BOVIDAE

The most common member of this family is Bos taurus (Domestic cattle). The utilization of young cattle is indicated by the presence of some quantity of small unfused cattle bones. The bones probably belonged to calves 6 months of age or younger.

Also represented is the sub-family of caprids, sheep and goats. These species can only be distinguished osteologically from one another on the basis of a few bones. Those bones for which discrimination is possible have all been identified as

Ovis aries (Domestic sheep). Therefore, all caprid elements are listed here as Ovis aries. The possibility of a few of these bones belonging to Capra hircus (Domestic goat) cannot be excluded, however. The utilization of bovids will be discussed in greater detail below.

FAMILY SUIDAE

Pig (Sus scrofa) is a common contributor to the Wilmington Boulevard faunal assemblage. Also the bones belonging to very young, almost foetal, piglets were recovered. Again the implications for human consumption of pigs will be examined in detail below.

The type and condition of many of the bones recovered precluded their identification beyond that of the general size of mammal represented. These bones are listed here as Large, Medium, Small, and Unidentifiable (Unident.) Mammals. Large Mammals can be confidently included with the identifiable cattle material as no other comparably sized mammal was identified from this assemblage. The Medium Mammal, unfortunately, could represent either pig or sheep which are similar in size. The vertebra and, especially, the ribs of these animals are difficult if not impossible to separate with confidence, particularly when in fragmentary condition. Small Mammal material includes that belonging to animals of the size of cats and smaller. When possible the body part represented in a size class of "unidentifiable" mammal material is indicated. Material unidentifiable to either size of mammal or body part is also listed. Thus all material received from the D.O.T. has been identified to the finest degree of specificity possible.

INTERPRETATION OF THE FAUNAL REMAINS FROM THE FOUR PRIVIES

The largest sample of animal bones analyzed were derived from four privies found on the following locations: Block 1183 Lot 55, Block 1184 Lot 7, Block 1184 Lot 13, Block 1192 Lots 18 and 19. Despite contamination of these deposits by the activities of twentieth century looters, it is believed that the faunal remains from these units were deposited during their initial filling. Thus, patterning in the

faunal remains from these deposits can be used to monitor meat consumption by residents of these areas during the time of initial filling. Some implications about the patterning observed in these data are presented below.

Figure 1 is a graphical representation of the relative contribution of each taxonomic class of animal recovered to the assemblage from each privy. Three classes (Lamellibranchia, Crustacea, and Reptilia) are represented in only one privy, that on Lot 55 of Block 1183. Fish are also better represented in this deposit than in the other privies. The relative contribution of the birds (Aves) and mammals is similar to all four privies, with the exception of a rise in the bird contribution in the Block 1192 Lots 18 and 19 privy.

Chicken is the most common bird in all assemblages. Duck is slightly better represented at the Block 1184 Lot 7 privy than in the other three deposits. Table 1 is a list of bones found in the various pieces of chicken: breast, wing, thigh, and drumstick. Figure 2 is a graphical representation of the relative proportions of these pieces in the four privy assemblages. Two cautions should be mentioned here. The first is that sample size is quite small and, therefore, patterns in piece distribution may reflect sample bias rather than consumption practices. Secondly, in this and other cut distributions discussed, because a certain cut is better represented than another does not necessarily mean that cut contains more meat. A cut may contain several bones elevating its apparent contribution over the more meaty cut which may contain only one bone. Cut distributions are shown here to highlight variation in the frequency of the selection of certain cuts between the four areas compared. They are not to be used to indicate meat contribution of specific cuts within a single privy assemblage.

Returning to Figure 2, with the exception of the disappearance of thigh cuts from two assemblages (probably due to sample bias), the primary variation in chicken part distribution is the apparent emphasis on breast pieces in the Block 1184 Lot 13 privy and, to a lesser extent, in the Block 1192 Lots 18 and 19 privy.

FIGURE 1

Percentage and Number of Bones in the Four Wilmington Boulevard Privy Assemblages by Class, L=Lamellibanchia, C=Crustacea, R=Reptilia, O=Osteichthyes, A=Aves, M=Mammalia

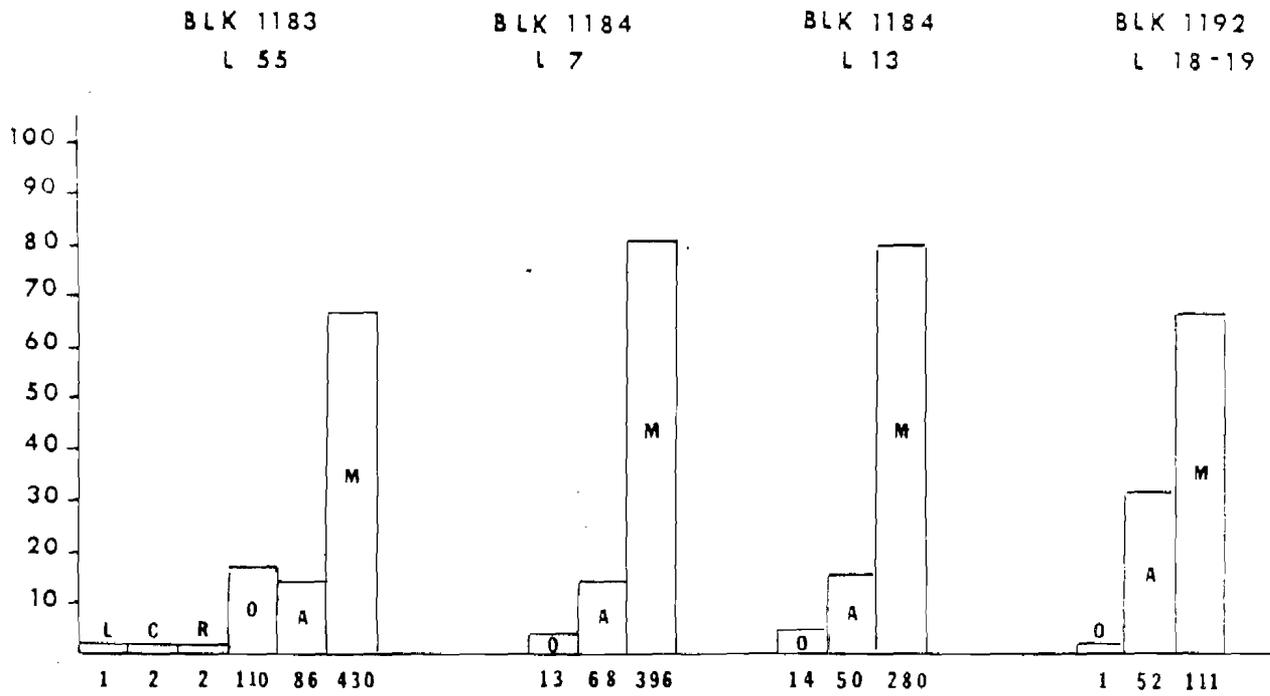


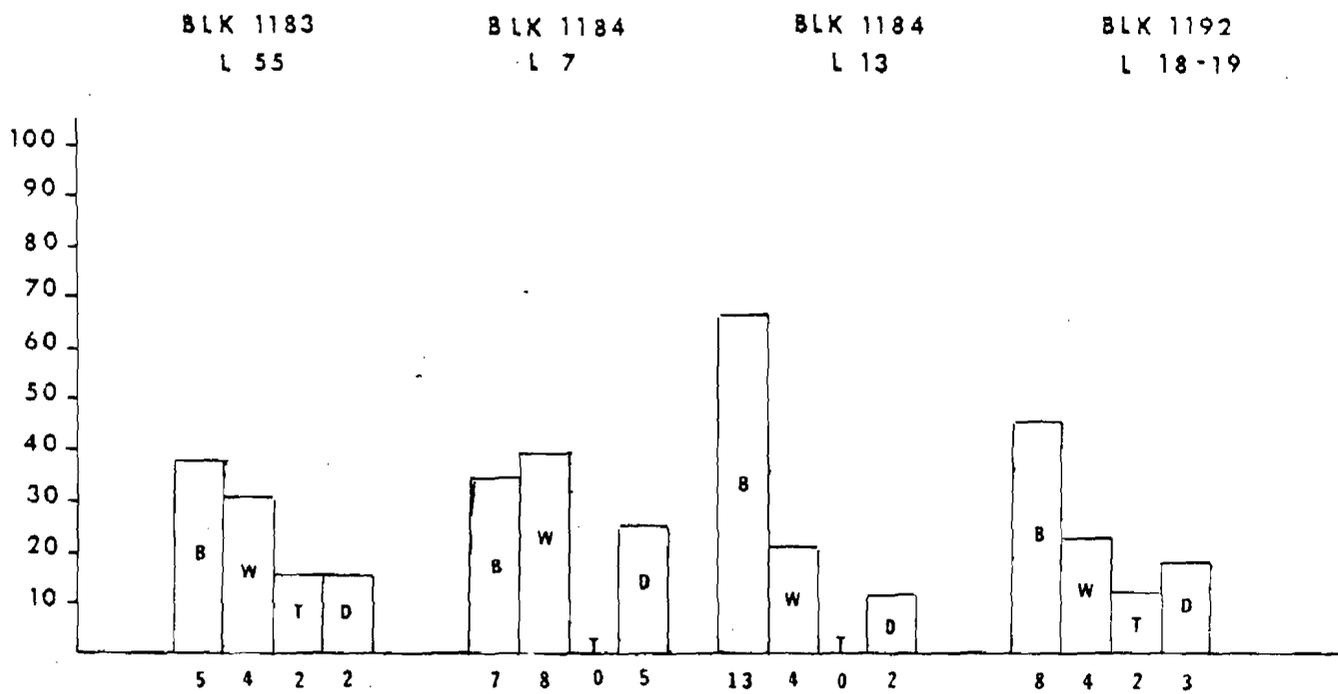
TABLE 1

SKELETAL ELEMENTS FOUND IN COMMERCIAL CUTS OF CHICKEN

- I. Breast: Sternum, Clavical, Coracoid, Scapula, Ribs
- II. Wing: Humerus, Radius, Ulna, Carpometacarpus
- III. Thing: Femur
- IV. Drumstick: Tibia

FIGURE 2

Percentage and Number of Chicken Bones in the Four Wilmington Boulevard Privy assemblages by Part, B=Breast, W=Wing, T=Thigh, D=Drumstick, see Table 1 for bones used to tabulate part representation



The drop in the representation of wing pieces in both these units relative to that in the Block 1183 Lot 55 privy and Block 1184 Lot 7 privy may indicate that wings were removed from breasts in these two areas, while they were still attached to breasts in the other two areas. The large number of chicken and Medium Bird tarsometarsus bones recovered in all deposits indicates, however, that chickens were not purchased as separate pieces. The tarsometatarsus is a non-meat bearing bone which is not sold with today's chicken parts or even with roasters or friers. Chickens eaten, thus, were probably raised by residents for their own consumption or purchased as whole, unprepared birds. The presence of cranial bones and phalanges in these assemblages also supports this interpretation.

The relative contribution of the major mammalian species to the four assemblages is shown in Figure 3. The Bos category includes both mature and immature cattle bones and the Sus category both adult and young pigs. Bos and Sus are uniformly the most common species utilized. Bos is slightly more frequent in the Block 1183 Lot 55 and Block 1184 Lot 7 privies. Sus is better represented in the Block 1184 Lot 13 privy and, especially, in the Block 1192 Lots 18 and 19 privy, where Sus bones constitute 57% of the sample. There is an apparent rise in the importance of sheep in the Block 1184 Lot 7 and Lot 13 privies. In fact, in the latter assemblage all three species are almost evenly represented.

A comparison of skeletal regions of Large and Medium Mammals is shown in Figures 4 and 5. Head elements for both categories of mammal in all areas are conspicuous by their absence. This emphasis on meatier Axial and Limb regions at the expense of essentially non-meat bearing Head elements indicates that butchery of mammals occurred some distance away and only selected parts of animals were brought into the area. In contrast to chickens, then it is unlikely that the major mammalian species utilized were raised by residents for their own consumption.

The presence of very young pig bones in the assemblages from these deposits, however, indicates the possibility of limited pig rearing. These piglets seem too

FIGURE 3

Percentage and Number of the Bones of the Three Major Mammalian Species for the Four Wilmington Boulevard Privy Assemblages, B=Bos, S=Sus, O=Ovis

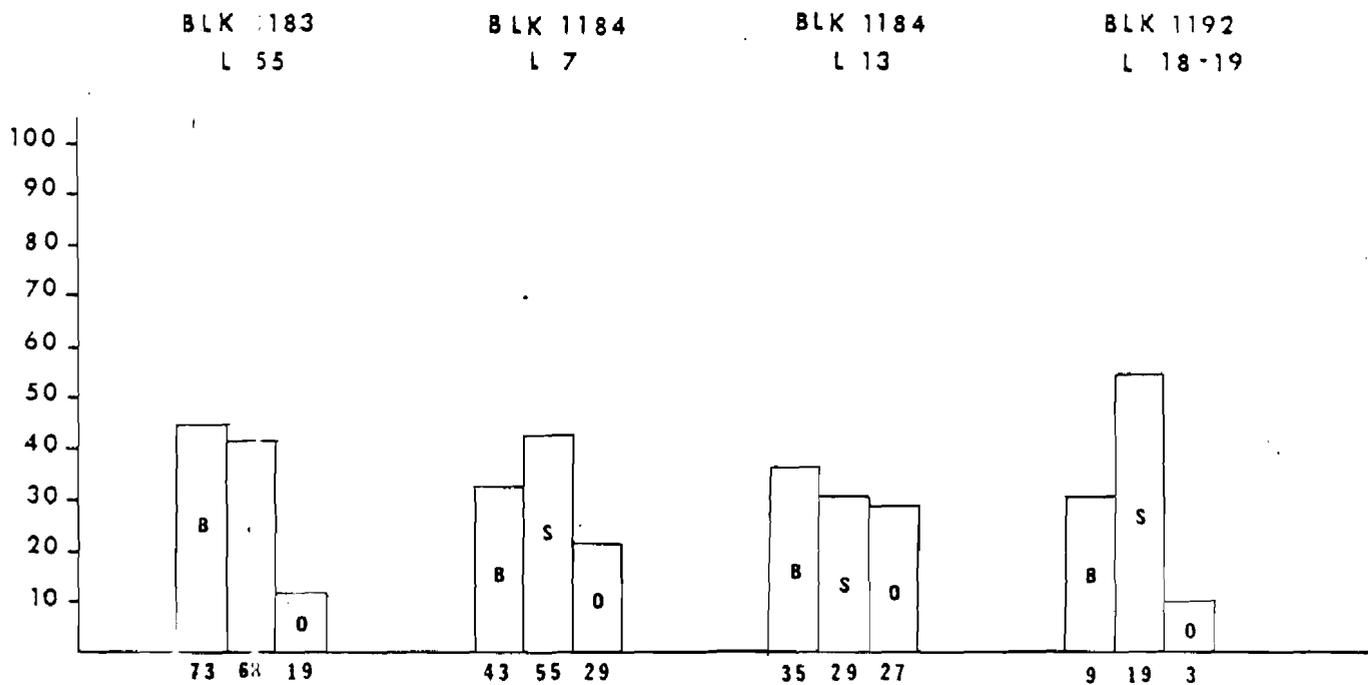


FIGURE 4

Percentage and Number of Large Mammal Bones for the Four Wilmington Boulevard Privy Assemblages by Skeletal Region, H=Head, A=Axial (vertebra and ribs), L=Limb, U=Unidentifiable region, based on a total of bones both "identifiable" and "unidentifiable" in the Large Mammal size category, probably all cattle

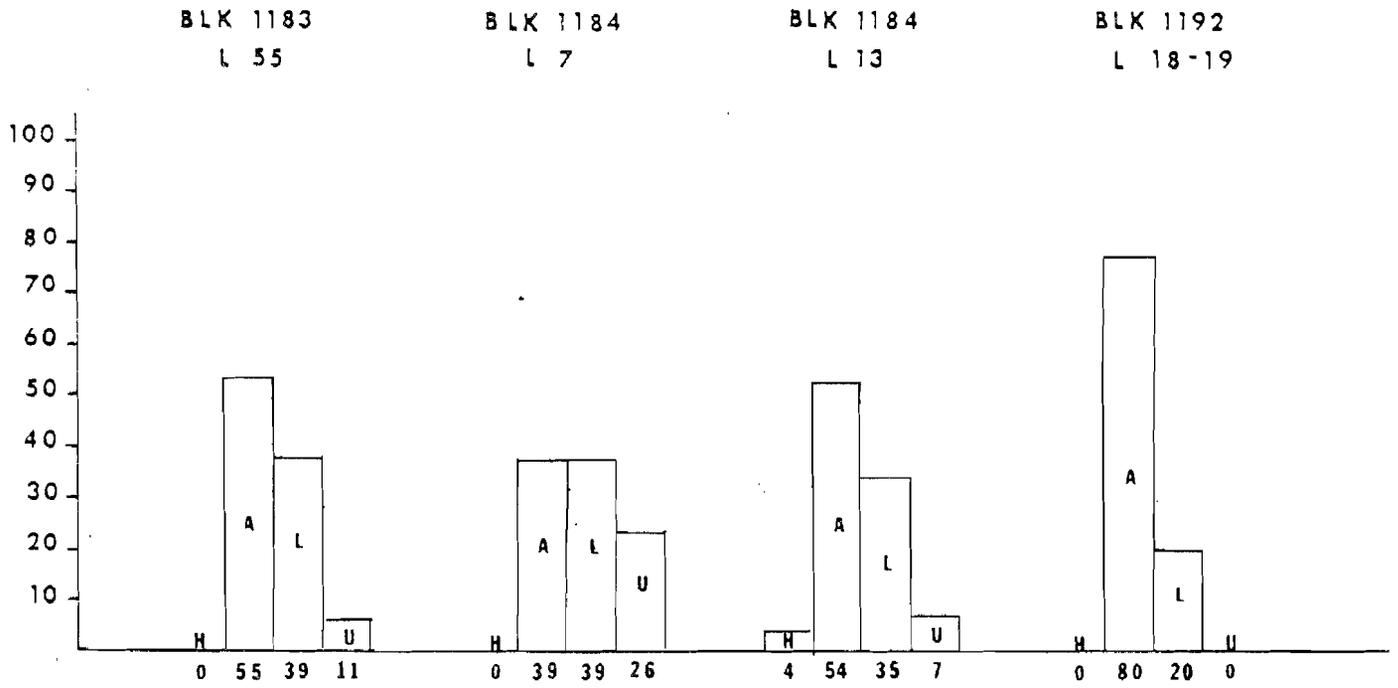
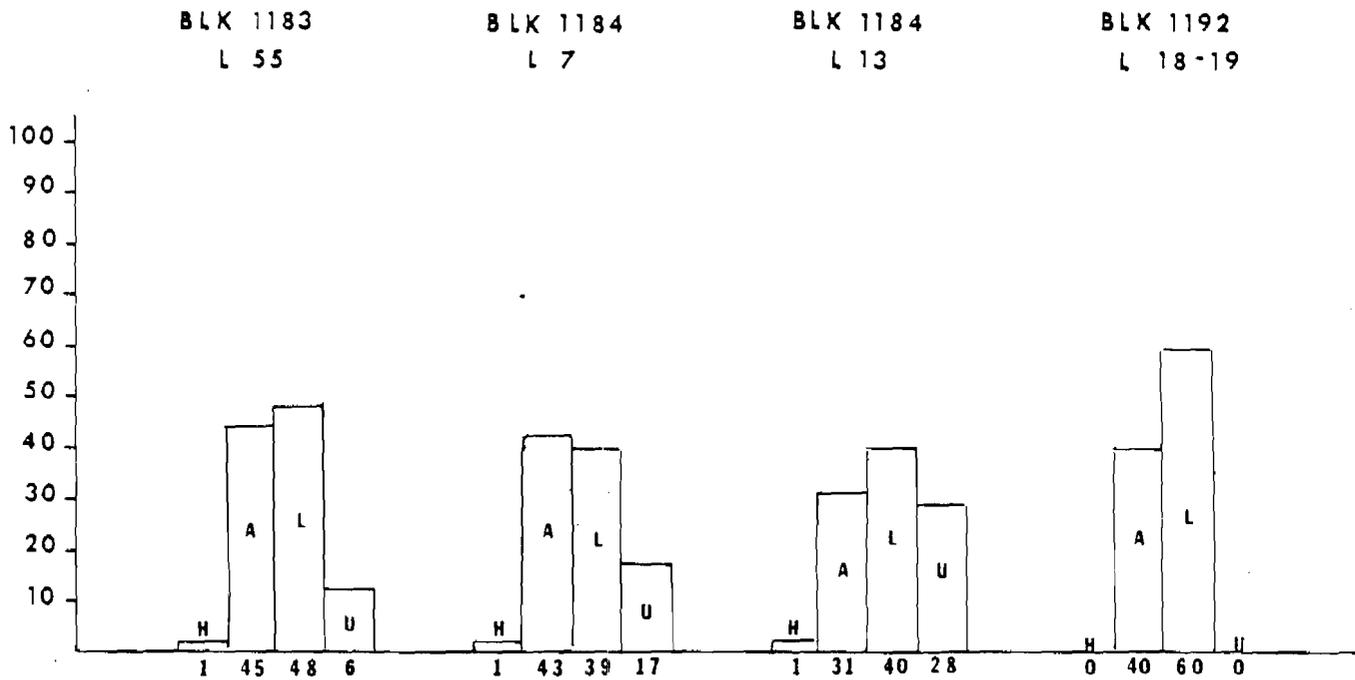


FIGURE 5

Percentage and Number of Medium Mammal Bones for the Four Wilmington Boulevard Privy Assemblages by Skeletal Region, H=Head A=Axial (vertebra and ribs), L=Limb, U=Unidentifiable region, based on a total of bones both "identifiable" and "unidentifiable" in the Medium Mammal size category, pig and sheep combined



young to have been marketed animals purchased by residents, and may represent the death from natural causes of locally born piglets. Even if this were the case, the butchery of adult pigs does not appear to have occurred in the area. The only head elements in the Medium Mammal category, of which pit is a member, belong to sheep. Pigs are represented solely by selected parts. The presence of young cattle, however, probably represents veal purchased by residents of the area and is not to be taken as evidence of rearing of cattle by area residents.

The most significant variations in the faunal assemblages from these privies are found in the cut distributions for the major mammalian species. The bones found in various cuts are listed in Tables 2-4. These tables are based on commercial cut charts found in the Joy of Cooking (Rombauer, 1931) and on information provided by Lyman (1979) based on an early twentieth century source. These are cuts which were likely to have been available to mid-nineteenth and twentieth century inhabitants of the area.

The distribution of these cuts for cattle in the four deposits is found in Figure 6. In all four areas Ribs is the most commonly represented cut. Again, this pattern does not mean that rib cuts provided more meat to the residents of these areas than other cuts. The ratio of bone to meat in rib cuts is the highest of any cut. However, the high percentage of rib cut elements in the Block 1192 Lots 18 and 19 privy relative to that in the other three areas indicates that this cut was particularly favored by residents of this area.

The other remarkable pattern in Bos cut distribution is the emphasis on Loin cuts in the Block 1183 Lot 55 privy. This emphasis is due to a high number of ischium shaft slices in the sample. This is the segment of bone commonly found in sirloin steaks.

A closer examination of Bos butchering patterns shows a large amount of variation in the type of breakage of the bones of the four assemblages. Figure 7 shows the percentage of Bos limb bones recovered as 1.) thin slices (S) such as

TABLE 2

SKELETAL ELEMENTS FOUND IN COMMERCIAL CUTS OF BEEF

- I. Round
 - A. Rump: Proximal Femur, Ischium, Pubis, Acetabulum
 - B. Round: Femur Shaft
 - C. Hindshank: Distal Femur, Patella, Tibia, (Tarsals ?)

- II. Loin
 - A. Sirloin: Ilium, Proximal Sacrum, Lower Lumbar Vertebra
 - B. Short Loin: Upper Lumbar Vertebra, Lower Thoracic Vertebra, Last Ribs

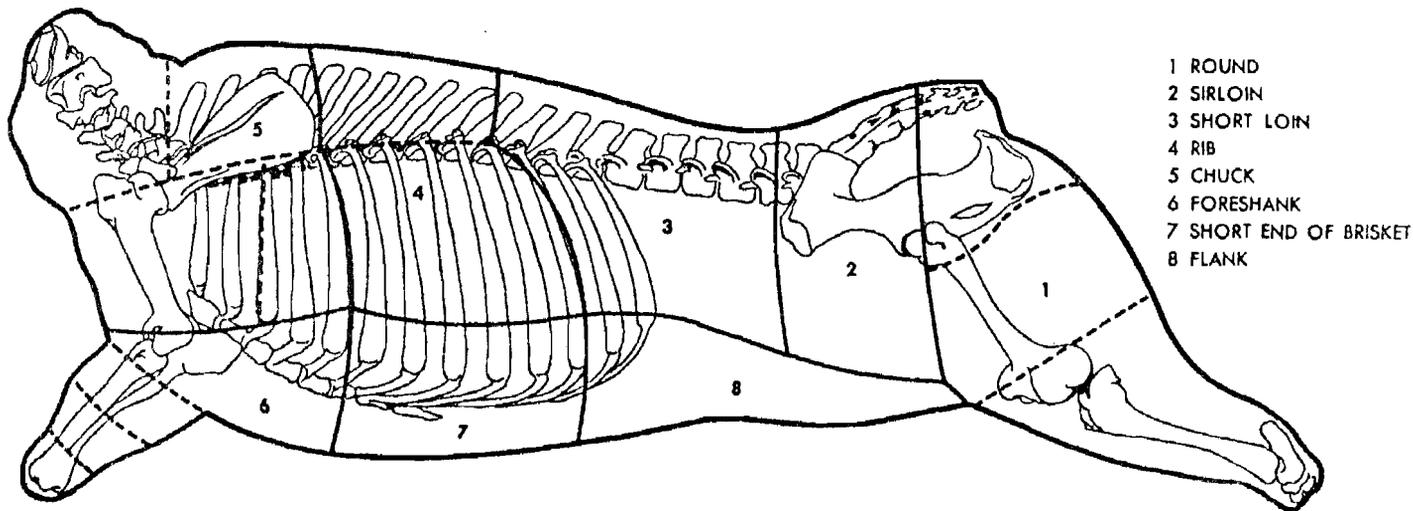
- III. Ribs
 - A. Rib Roasts and Chops: Thoracic Vertebra 6-12, Dorsal Ribs 6-12
 - B. Short Ribs: Rib Mid-Sections
 - C. Brisket: Ventral Ribs, Sternum, Rib Cartilage

- IV. Forelimb Cuts
 - A. Chuck: Scapula Blase, Upper Thoracic Vertebra 1-5
 - B. Shoulder: Proximal Humerus, Humerus Shaft, Dorsal Ribs 1-5
 - C. Foreshank: Distal Humerus, Radius, Ulna

- V. Neck - Cervical Vertebra

Underlined bones are those used in the computation of beef cut distribution shown in Figure 6

BONE STRUCTURE AND
COMMERCIAL CUTS FROM
A CARCASS OF BEEF



- 1 ROUND
- 2 SIRLOIN
- 3 SHORT LOIN
- 4 RIB
- 5 CHUCK
- 6 FORESHANK
- 7 SHORT END OF BRISKET
- 8 FLANK

DIVISIONS OF COMMERCIAL CUTS AND RETAIL CUTS OF BEEF

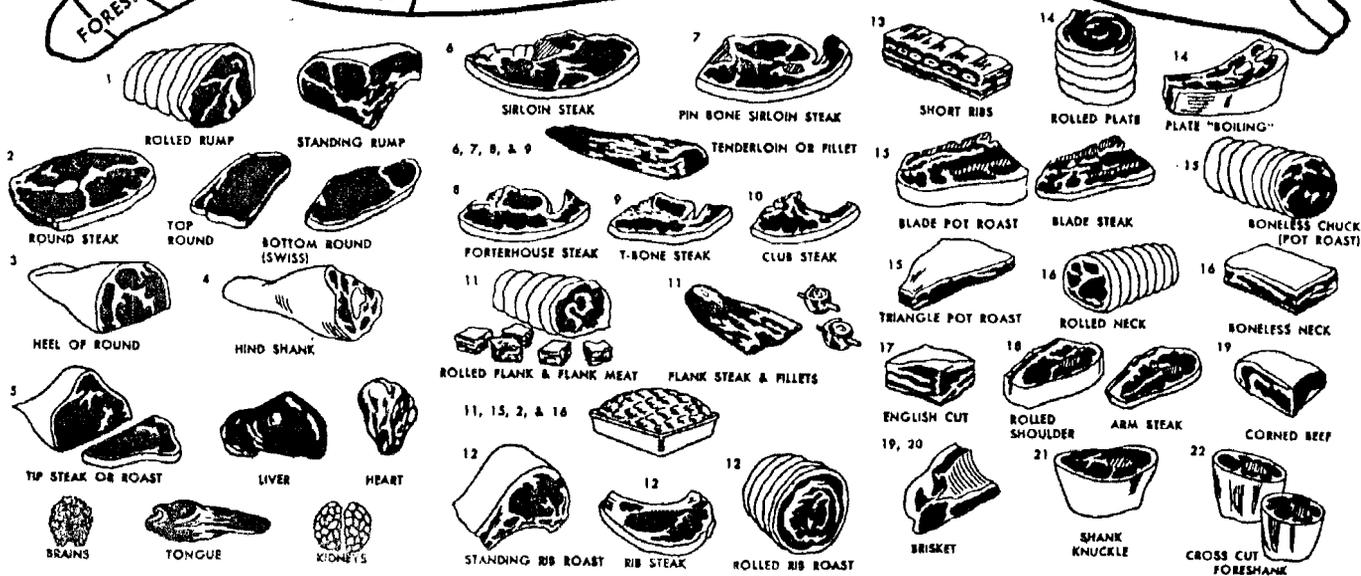
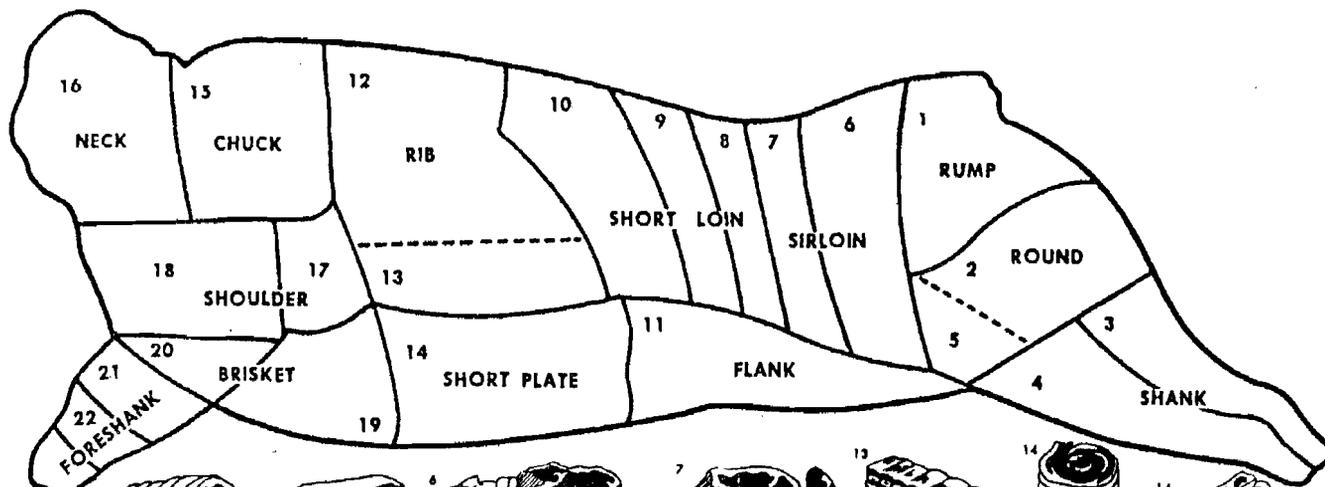


TABLE 3

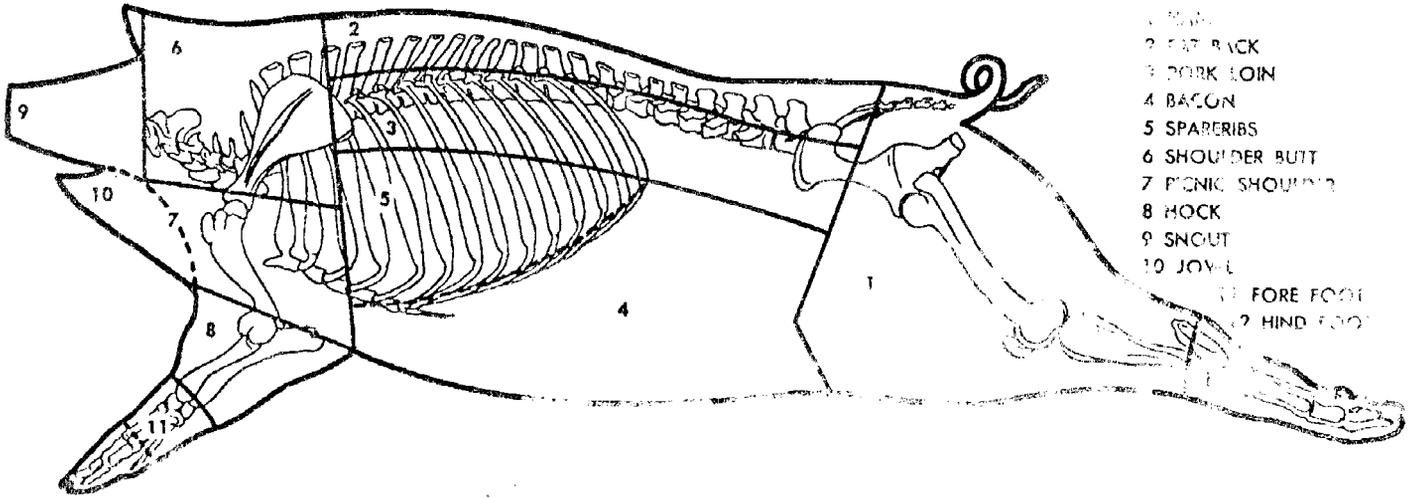
SKELETAL ELEMENTS FOUND IN COMMERCIAL CUTS OF PORK

- *I. Ham
 - A. Butt Half: Mid-Illium, Pubis, Ischium, Sacrum, Proximal Femur
 - B. Shank Half: Distal Femur, Proximal Tibia, Fibula
- *II. Hindfoot: Distal Tibia, Tarsals, Metatarsals, Phanlanges
- III. Pork Loin: Distal Illium, Proximal Sacrum, Lumbar and Thoracic Vertebra, Dorsal Ribs
- IV. Ribs: Mid and Ventral Ribs
- *V. Forelimb
 - A. Butt: Distal Scapula, Thoracic Vertebra, (cervical Vertebra ?)
 - B. Picnic: Proximal Scapula, Proximal Humerus
 - C. Hock: Distal Humerus, Proximal Radius, Proximal Ulna
- *VI. Forefoot: Distal Radius, Distal Ulna, Carpals, Metacarpals, Phalanges

* Cuts Represented in Figure 8

Underlined bones are those used in the computation of pork cut distributions shown in Figure 8

BONE STRUCTURE AND
COMMERCIAL CUTS FROM
A CARCASS OF PORK



DIVISIONS OF COMMERCIAL CUTS AND RETAIL CUTS OF PORK

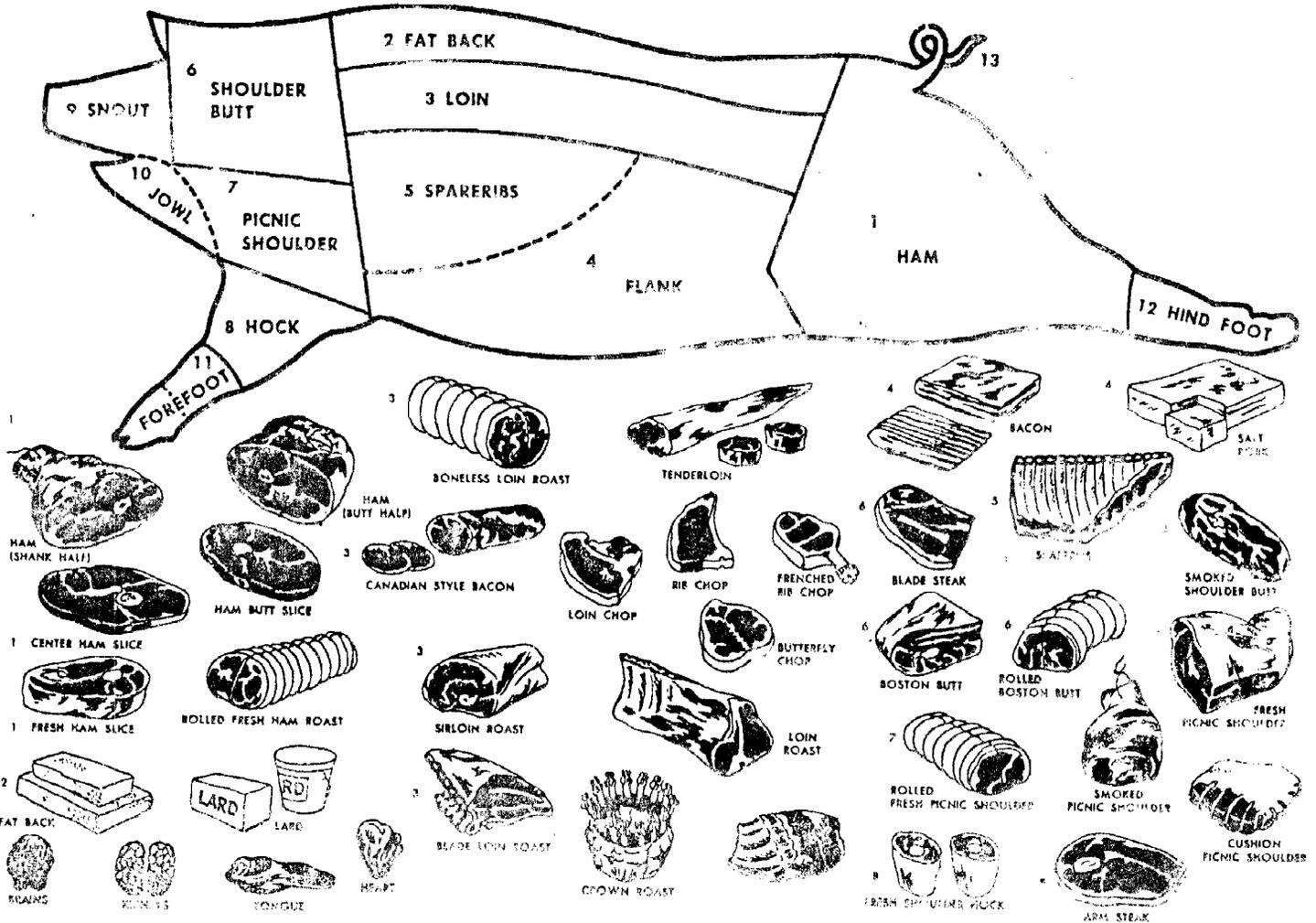


TABLE 4

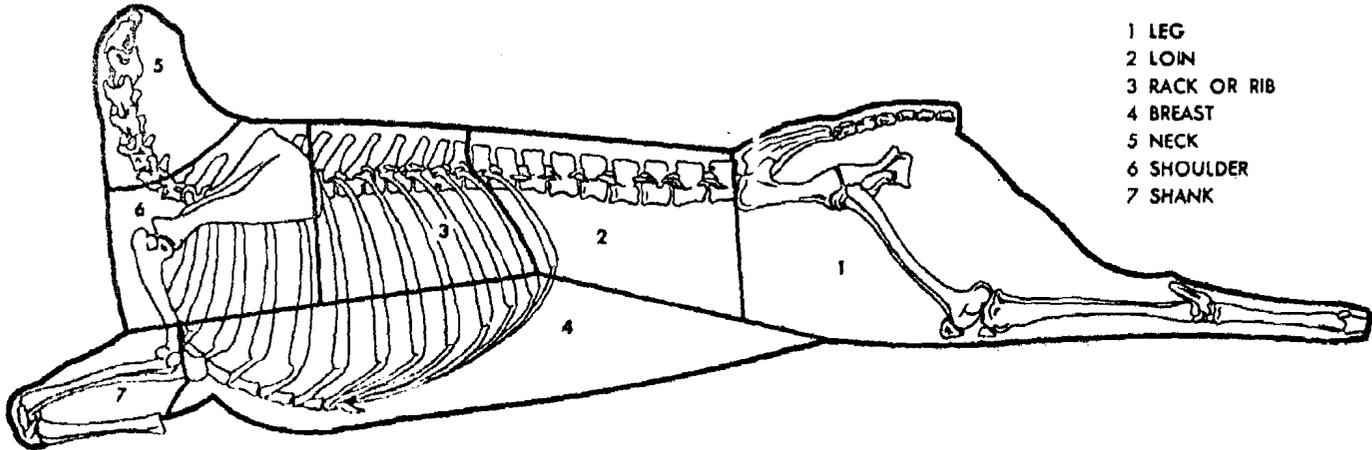
SKELETAL ELEMENTS FOUND IN COMMERCIAL CUTS OF MUTTON

- *I. Leg: Pelvis, Sacrum, Femur, Tibia, Patella, Tarsals, Metatarsals
- II. Loin: Lumbar Vertebra
- III. Ribs
 - A. Rack: Thoracic Vertebra 6-12, Dorsal Ribs 6-12
 - B. Breast and Brisket: Ventral Ribs, Sternum
- *IV. Forelimb Cuts
 - A. Shoulder: Cervical Vertebra, Scapula, Thoracic Vertebra 1-5, Dorsal Ribs 1-5
 - B. Shank: Distal Humerus, Radius, Ulna, Carpals, Metacarpals

* Cuts Represented in Figure 10

Underlined bones are those used in the computation of mutton cut distributions shown in Figure 10

**BONE STRUCTURE AND
COMMERCIAL CUTS FROM
A CARCASS OF LAMB**



- 1 LEG
- 2 LOIN
- 3 RACK OR RIB
- 4 BREAST
- 5 NECK
- 6 SHOULDER
- 7 SHANK

DIVISIONS OF COMMERCIAL CUTS AND RETAIL CUTS OF LAMB

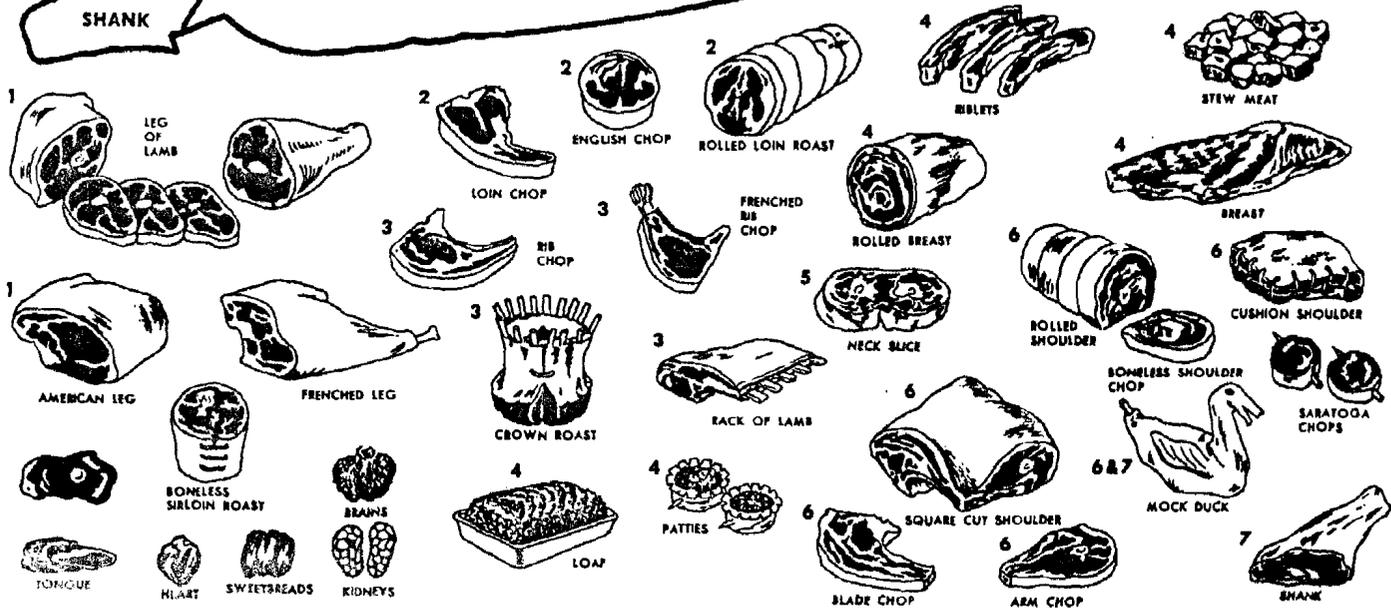
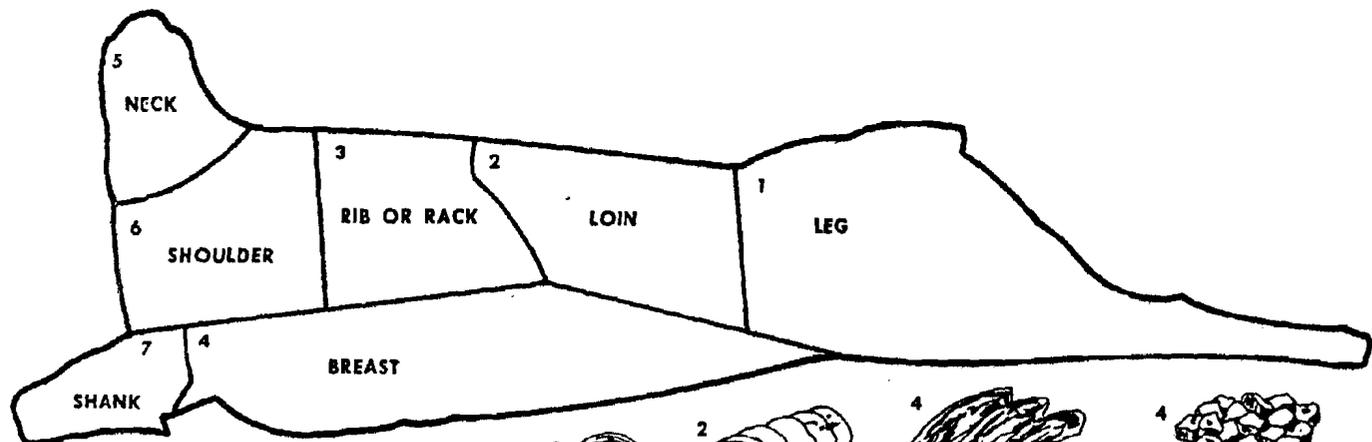


FIGURE 6

Percentage and Number of Bos Bones found in Different Beef Cuts for the Four Wilmington Boulevard Privy Assemblages, R=Round, L=Loin, RB=Ribs, F=Forelimb Cuts, N=Neck, see Table 2 for list of bones used to compute these percentages

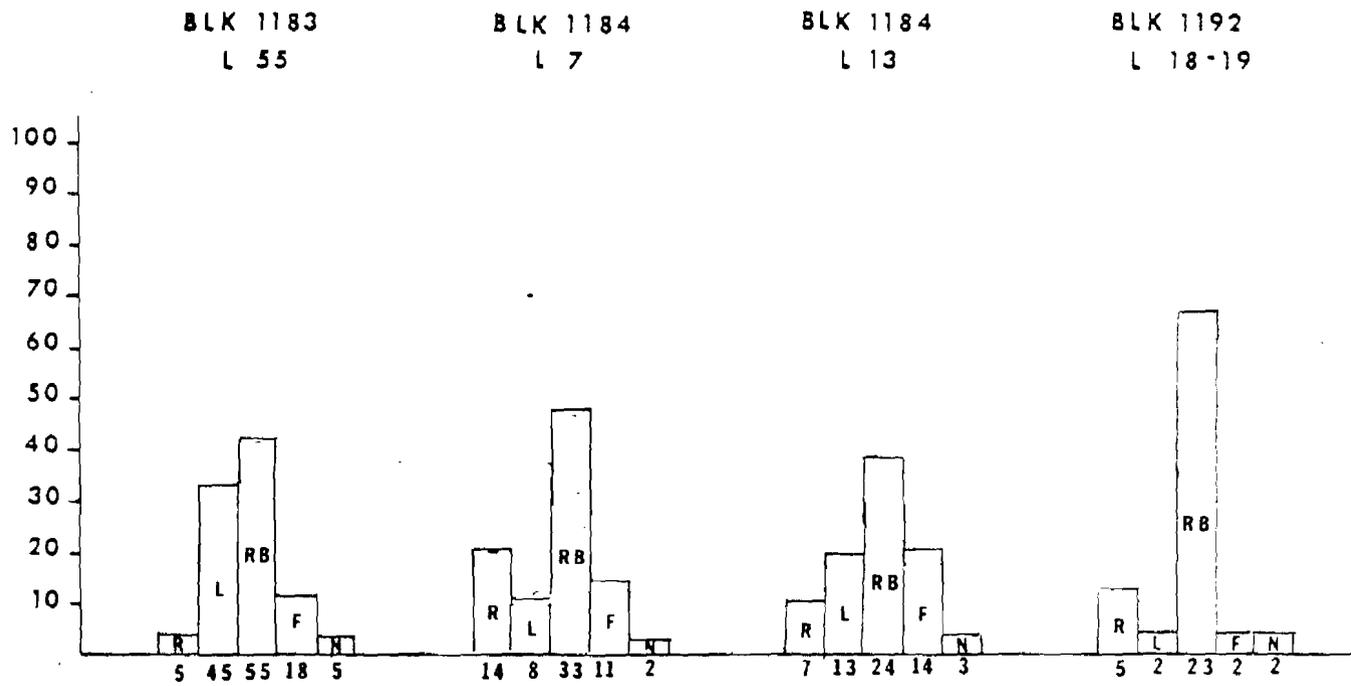
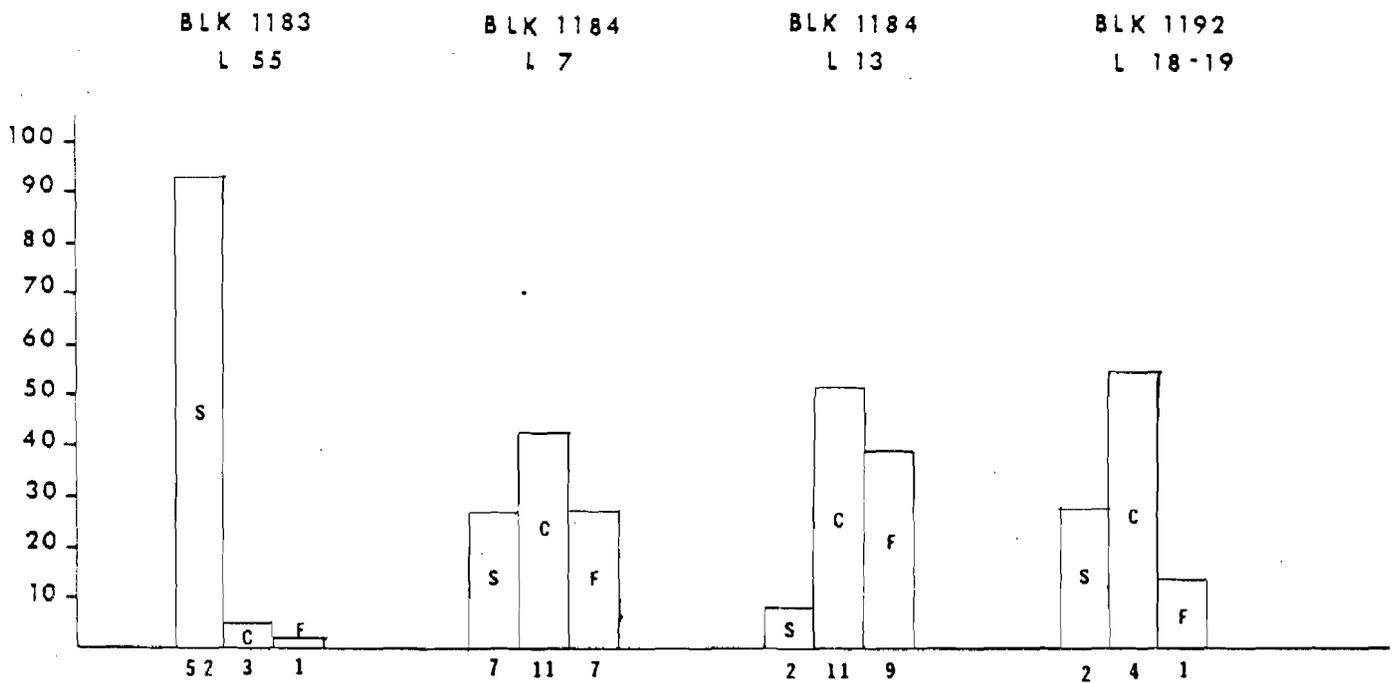


FIGURE 7

Percentage and Number of Bos Limb Bones Broken in Three Different Ways for the Four Wilmington Boulevard Privy Assemblages, S=Slice, C=Cut, F=Fracture, see text page 9 for explanation



those bones found in steaks and chops, 2.) wider pieces with cut marks (C) on one or both ends such as those bones found in larger roast cuts, and 3.) those with fractured ends (F) probably due to post-depositional breakage of whole bones. Scarring on the ends of the bones looks as if both slices and cuts were obtained by sawing through the bone. There are few butchery scars which would indicate that bones had been chopped through, although it is possible that in some cases bones may have been fractured in this manner.

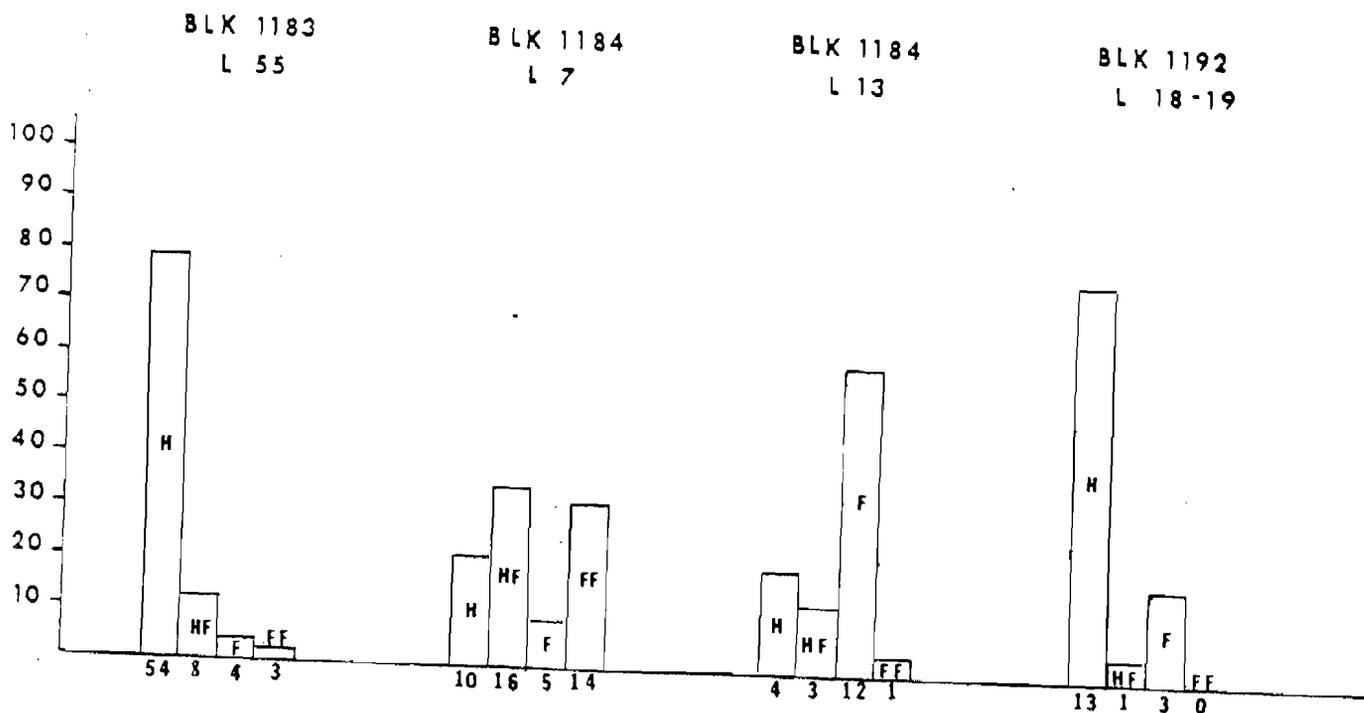
The most striking variation noted in butchery patterns for the Bos material (Figure 7) is the high proportion of slices in the Block 1183 Lot 55 privy. Cut bones are the most common Bos breakage pattern in the other three areas, especially in the Block 1192 Lots 18 and 19 privy. Thus, while the residents of the Block 1183 Lot 55 area seem to have enjoyed most of their beef in the form of sirloin steaks, residents of the other areas consumed more of their beef in the form of roasts from the rump, loin, and shoulder area. Lumbar and lower thoracic vertebra in all areas were often sliced through both longitudinally and transversely, indicating that meat from this area was most frequently eaten in various steak and chop cuts.

Bones found in pig and sheep cuts are listed in Tables 3 and 4. As vertebra and rib fragments of these species were not distinguished from one another, it was not possible to compare distributions of cuts from this area for either species. There appears to be little variation between units in bones from the Axial portion of the skeleton of Medium Mammals (Figure 6), however. Whether, masked variations in pig and sheep rib and chop cuts occur is, unfortunately, not discernable.

The major variations in pig cut distribution (Figure 8) are a high proportion of bones found in ham cuts in the Block 1183 Lot 55 and Block 1192 Lots 18 and 19 privies, a high proportion of forelimb cuts in the Block 1184 Lot 13 privy, and an emphasis on fore-and hindlimb in the Block 1184 Lot 7 privy. The particular ham cuts popular in the Block 1183 Lot 55 and Block 1192 Lots 18 and 19 privies differ

FIGURE 8

Percentage and Number of Sus Bones found in Different Pork Cuts for the Four Wilmington Boulevard Privy Assemblages, H=Ham, HF=Hindfoot, F=Forelimb, FF=Forefoot, see Table 3 for list of bones used to compute these percentages



from one another, as indicated in the pig bone breakage patterns diagramed in Figure 9. In the former area, ham is represented by the distal femur and proximal tibia cut transversly at the shaft. These are the bones commonly found in ham roasts, shank portion. The ham in the latter area, in contrast, seems to have been consumed as ham steaks, as indicated by the high proportion of slices of femur shafts recovered.

The only cuts of mutton which may be compared here are those from the fore and hind legs (Figure 10). The small size of the Ovis sample makes any conclusions about mutton consumption extremely tentative. These variations are apparent with an examination of Figure 10 and will not be commented upon further. The high percentage of fractured sheep bones, shown in Figure 11, indicates that a good proportion of the mutton consumed in all areas was eaten as undivided roasts in which whole bones were included. There was also a number of complete, unbroken Ovis bones recovered from these privies. A higher number of slices found in the Block 1183 Lot 55 privy is remarkable and reflects a greater amount of mutton leg chops were eaten in this area.

CONCLUSION

Certain similarities exist in patterns of animal utilization in the four areas examined. In all areas, fowl consumed seems to have been raised by residents for their own consumption. Area residents also participated in some trapping of musk rat, probably for supplementary income from the sale of their pelts and, perhaps, for supplementary meat. The majority of meat consumed by residents of this sector of Wilmington Boulevard was derived from domestic livestock. Hunted game appears to have played no role in the local diet. Moreover, beef, pork, and mutton seems to have been purchased from retailers and not raised by area residents for their own consumption. A possibility of limited local pig rearing does exist, however.

FIGURE 9

Percentage and Number of Sus Limb Bones Broken in Three Different Ways for the Four Wilmington Boulevard Privy Assemblages, S=Slice, C=Cut, F=Fracture, see text page 9 for explanation

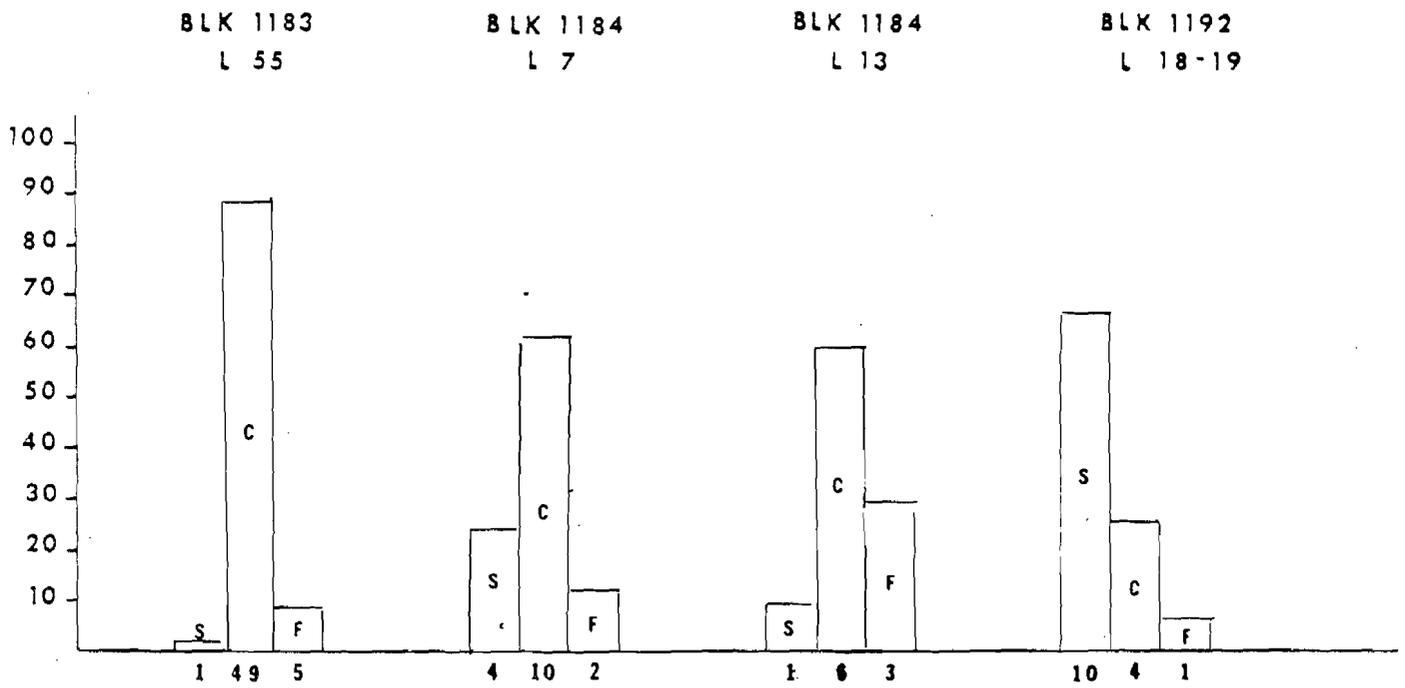


FIGURE 10

Percentage and Number of Ovis Bones found in Different Mutton Cuts for the Four Wilmington Boulevard Privy Assemblages, L=Leg, F=Forelimb, see Table 4 for list of bones used to compute these percentages

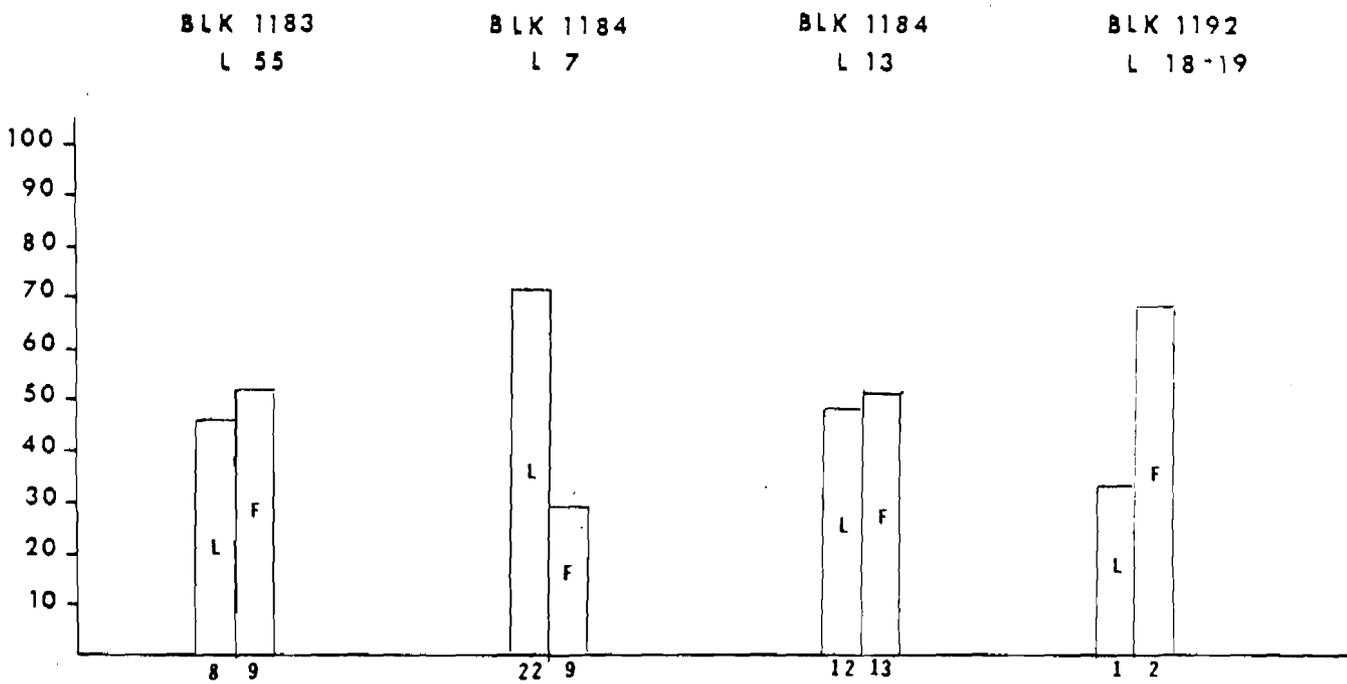
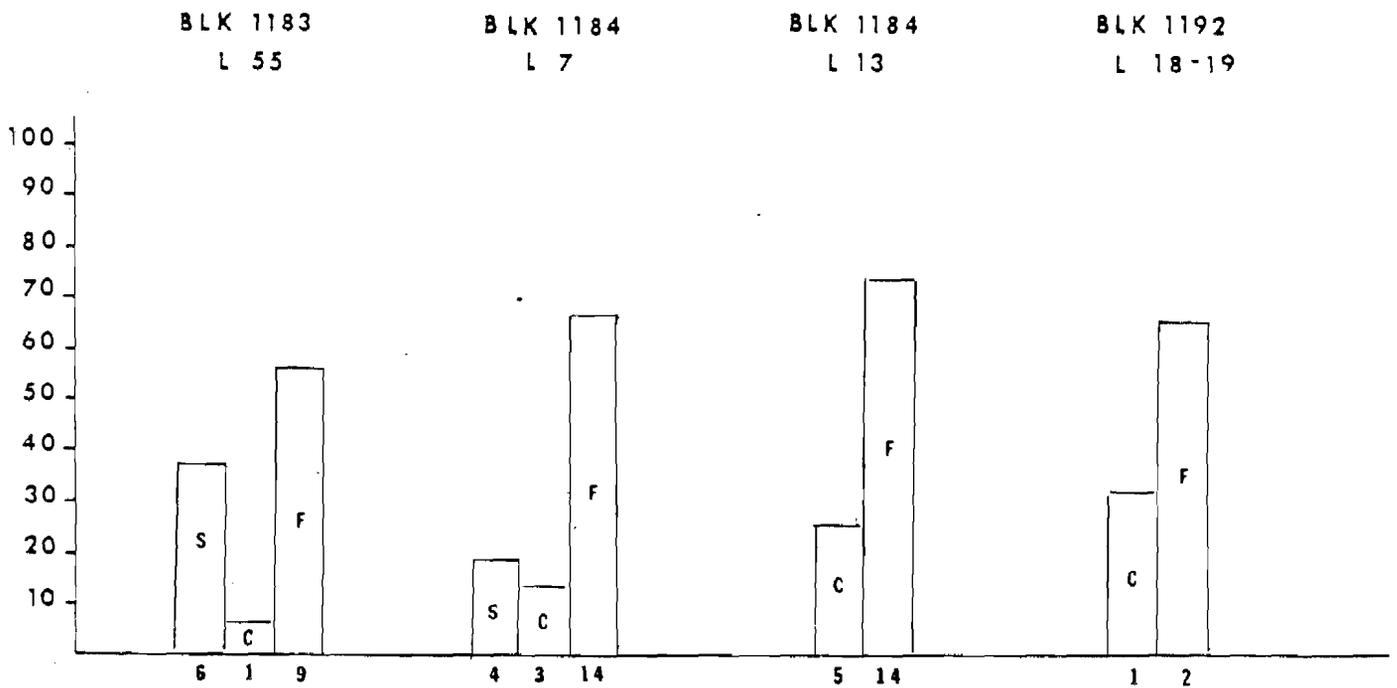


FIGURE 11

Percentage and Number of Ovis Limb Bones Broken in Three Different Ways for the Four Wilmington Boulevard Privy Assemblages, S=Slice, C=Cut, F=Fracture, see text page 9 for explanation



Beyond these general similarities, there are marked differences in patterns of meat consumption in the area. If one assumes that the faunal remains from each of the four privies is representative of the diet of the residents of each area during the time of deposition (an assumption which may not be warranted in all cases), then the following statements may be made regarding meat consumption patterns in the four areas examined.

The faunal remains from the block 1183 Lot 55 privy indicate that the residents of this area enjoyed the most varied diet, consisting of some shell fish and crab, several varieties of fish and fowl, as well as beef, pork, and mutton. Beef was primarily consumed in the form of sirloin steaks. Almost equally utilized pig meat was consumed primarily in the form of ham roasts. Less frequently eaten mutton was often consumed in the form of leg chops.

The residents of the block 1184 Lot 7 area (as well as those of the other two areas considered) seem to have relied more on fowl and mammals as primary meat sources. Duck seem to have been more commonly utilized in the Lot 7 area than elsewhere. Proportionally more beef rib cuts were consumed here. Cuts from the round and shoulder area seem to have been of some importance and were most frequently eaten in roast portions. Pork was, perhaps, somewhat more frequently consumed here than in the first area discussed. Pigs' feet seem to have been the most commonly selected cut. Mutton, occurring as roasts, was also of increased importance in this area.

These trends are even more strongly expressed in the Block 1184 Lot 13 area. Here beef was derived with generally equal frequency from the various cut regions and was consumed mostly in roast size portions. Pork cuts were eaten with roughly equal frequency as beef cuts. Roast size portions from the fore limb area seem to have been most commonly selected. Mutton was eaten here with greater frequency than elsewhere.

Thus, there seems to have been considerable variability in meat consumption patterns within a relatively confined area of Wilmington Boulevard. It is hard to say from what these differences result. Three of the areas in which these privies are situated were occupied by skilled laborers of one variety or another. The Block 1183 Lot 55 privy, whose assemblage differs most from the other three faunal assemblages discussed, appears to have been filled at a slightly later date, late nineteenth early twentieth centuries. Again skilled laborers seem to have been the primary occupants of this area. It is certainly possible that the differences in meat consumption noted here may have resulted from synchronic variation in the economic status of these laborers or in their ethnic backgrounds. Short term diachronic fluctuations in local and regional economic conditions known to have occurred during this period of time may also have effected meat consumption patterns in the Wilmington Boulevard area. The causes of the noted variation in patterns of meat consumption in this area cannot be discerned until: 1.) a more exact designation of the source and time of primary filling of the privies can be made and 2.) (related to this aim) until comparable analysis of other artifacts recovered is available. Even at this stage, however, the analysis of the faunal remains from the eastern sector of South Wilmington Boulevard has provided provocative insights into variations in patterns of meat consumption in Wilmington during the late nineteenth-early twentieth centuries. These are insights which have bearing on our understanding of the social history of this area during an important stage of its development and, thus, demonstrate the potential of such research for expanding this understanding.

REFERENCES CITED

- Lyman, L. 1979. "Available Meat from Faunal Remains: A Consideration of Techniques" American Antiquity 44(3):536-544.
- Rombauer, I. 1931. The Joy of Cooking The New American Library, New York.

APPENDIX 1

CLASS MAMMALIA INVENTORY

Mammals - 1

Provenience	Mammal	Total	Skull	Mandible	Scapula	Humerus	Radius	Ulna	Carpal	Pelvis	Femur	Patella	Tibia	Fibula	Tarsal	Metapodial	Phalanx	Limb	Cervical V.	Thoracic V.	Lumbar V.	Sacrum	Vertebra	Rib	Unident.	
RT/21-070: Blk. 1183 L. 55 F. 1	TOTAL	430																								
	<u>Bos taurus</u>	61			10	4	1	3	2	34	2		2										3			
	Young Bos	12			1	4	4	2	1																	
	<u>Sus scrofa</u>	64			2		3	1		8	15	1	17	8	4	3	2									
	Young Sus	4														4										
	<u>Ovis aries</u>	19			2	6	1				1	4		3												
	<u>Felis catus</u>	5			1		3							1												
	<u>Ondatra zibethicus</u>	11			1						8	2														
	<u>Rattus sp.</u>	6					2				1	2		1												
	<u>Didelphis marsupialis</u>	1			1																					
	Large Mammal	109																		5	11	8		20	54	11
	Medium Mammal	105																	7	3	10	8	2	18	45	12
	Small Mammal	2																	1						1	
	Unident. Mammal	31																						5		26
-044: Blk. 1184 L. 7 F. 1	TOTAL	396																								
	<u>Bos taurus</u>	32														3										
	Young Bos	11			1	3	3		1		3			1												
	<u>Sus scrofa</u>	43				1	4	2	2	2	8		3	2	1	7	11									
	Young Sus	12			1	1			2				4			2			2							
	<u>Ovis aries</u>	29			1	2	1	3	1	2	3	9		3		1				1						
	<u>Felis catus</u>	19			5	1	1		2		1	1				3							1	4		
	<u>Rattus sp.</u>	18			4					4	7		3													
	<u>Sylvilagus floridanus</u>	1										1														
	Large Mammal	72																	1	2				11	32	26
	Medium Mammal	143																	9	1	16	8	2	34	35	38
	Small Mammal	1																						1		
	Unident. Mammal	15																								15
	-045: Blk. 1184 L. 13 F. 1	TOTAL	280																							
<u>Bos taurus</u>		30	2	3	6	5	1	2		5	3	2				1										
Young Bos		5		1	1	2										1										
<u>Sus scrofa</u>		21			5	2	2	4			1		2	i	2	2										
Young Sus		8				2	2	1					1			2										
<u>Ovis aries</u>		27			8	5		1		2	5		5		1											
<u>Felis catus</u>		3	1											1		1										
<u>Ondatra zibethicus</u>		1		1																						
Large Mammal	68																		3	5	12		10	30	8	

Mammals - 2

Provenience	Mammal	Total	Skull	Mandible	Scapula	Humerus	Radius	Ulna	Carpal	Pelvis	Femur	Patella	Tibia	Fibula	Tarsal	Metapodial	Phalanx	Limb	Cervical V.	Thoracic V.	Lumbar V.	Sacrum	Vertebra	Rib	Unident.
81/21-045: Blk. 1184 L. 13 F. 1 (contd.)	Medium Mammal	111	1															11	3	2	10		8	28	48
	Small Mammal	2																							2
	Unident. Mammal	4																							4
-020: Blk. 1192 L. 18&19 F. 1	TOTAL	111																							
	<u>Bos taurus</u>	8			1	1				4	1	1													
	Young Bos	1				1																			
	<u>Sus scrofa</u>	16			3					1	10		1			1									
	<u>Ovis aries</u>	3				1	1			1															
	<u>Felis catus</u>	17	1	1	1	1	1	2		2	2								2				1	3	
	Large Mammal	34																	2	3	5		3	20	1
	Medium Mammal	25																	7	2	2	3	1	10	
Unident. Mammal	7																							7	
46: Blk. 1184 L. 58 Pit 1	TOTAL	23																							
	<u>Bos taurus</u>	4			1					1			1			1									
	Young Bos	1			1																				
	<u>Sus scrofa</u>	1					1																		
	Young Sus	1														1									
	<u>Ovis aries</u>	1											1												
	Large Mammal	8																7						1	
Medium Mammal	7																4						2	1	
-47: Blk. 1184 L. 58 Pit 2	TOTAL	1																							
	<u>Ondatra zibethicus</u>	1				1																			
-048: Blk. 1184 L. 58 Pit 3	TOTAL	11																							
	<u>Sus scrofa</u>	2													1	1									
	<u>Ovis aries</u>	2				2																			
	Medium Mammal	7																5		2					
-052: Blk. 1184 L. 58A Sq. 1 Lvl. D	TOTAL	1																							
	Large Mammal	1																						1	
-053: Blk. 1184 L. 58A Sq. 2 Lvl. A	TOTAL	7																							
	<u>Bos taurus</u>	4			2		2																		
	<u>Ovis aries</u>	1									1														
	Large Mammal	1																						1	
	Medium Mammal	1																				1			

Mammals - 3

Provenience	Mammal	Total	Skull	Mandible	Scapula	Humerus	Radius	Ulna	Carpal	Pelvis	Femur	Patella	Tibia	Fibula	Tarsal	Metapodial	Phalanx	Limb	Cervical V.	Thoracic V.	Lumbar V.	Sacrum	Vertebra	Rib	Unident.
81/21-054: Blk. 1184 L. 58A Sq. 2 Lvl. B	TOTAL Medium Mammal	$\frac{1}{1}$																1							
-072: Blk. 1184 L. 58A F. 1	TOTAL <u>Ondatra zibethicus</u> Unident. Mammal	$\frac{4}{2}$ 2				1							1												2
-073: Blk. 1184 L. 58A F. 2	TOTAL <u>Ondatra zibethicus</u>	$\frac{1}{1}$			1																				
-055: Blk. 1184 L. 58A Sq. 3 Lvl. A	TOTAL <u>Sus scrofa</u> <u>Ovis aries</u> <u>Felis catus</u> Medium Mammal Small Mammal	$\frac{6}{1}$ 1 1 1 2								1								1					1		
?: Blk. 1184 L. 58A Sq. 5 (?)	TOTAL <u>Ovis aries</u> Medium Mammal	$\frac{2}{1}$ 1					1														1				
-056: Blk. 1184 L. 58B Sq. 1 Lvl. A	TOTAL Medium Mammal	$\frac{1}{1}$																			1				
-057: Blk. 1184 L. 58C Sq. 1 Lvl. A	TOTAL Young Bos	$\frac{1}{1}$			1																				
-058: Blk. 1184 L. 58C	TOTAL Medium Mammal Unident. Mammal	$\frac{3}{1}$ 2																					1		2
-061: Blk. 1184 L. 58C Sq. 2 Lvl. B	TOTAL <u>Bos taurus</u> <u>Sus scrofa</u> <u>Ovis aries</u> Large Mammal Medium Mammal	$\frac{19}{2}$ 3 1 4 9		2	1		1								1								2		2
-068: Blk. 1184 L. 58C T.P. 4	TOTAL <u>Felis catus</u>	$\frac{1}{1}$											1												

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