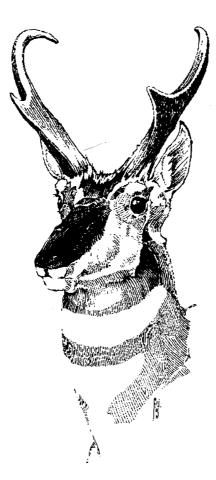
Mammal Collections in the Western Hemisphere

A Survey and Directory of Existing Collections

Mark S. Hafner, William L. Gannon, Jorge Salazar-Bravo, and Sergio Ticul Alvarez-Castañeda



American Society of Mammalogists

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Published by the American Society of Mammalogists

Allen Press Lawrence, Kansas ISBN 0-89338-055-5 1997

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May, 1997

Published by the

American Society of Mammalogists

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Mammal Collections in the Western Hemisphere

INTRODUCTION AND HISTORICAL PERSPECTIVE

Throughout its history, the American Society of Mammalogists (ASM) has undertaken periodic assessments of the location, size, composition, and curatorial status of collections of Recent mammals in North America. The first such report, authored by A. Brazier Howell (1923) and published in the *Journal of Mammalogy*, appeared just 4 years after the ASM was founded. Howell (1923:113) stated two principal reasons for conducting his survey of mammal collections:

"The larger museums are relatively sufficient unto themselves as regards research material; but the smaller ones, as well as unattached individuals, are often handicapped by their inability to secure, either by purchase or loan, specimens which they may badly need for investigations. The primary purpose in compiling this list is to indicate possible sources from which such material may be obtained. Another effect which it is hoped the appearance of this list will have is the stimulation of the interest of the small collector, the beginner and the amateur. Few will undervalue the importance of gaining recruits for the study of mammalogy..."

With help from E. W. Nelson of the Bureau of Biological Survey, Howell (1923) identified 37 public and 40 private collections in North America. At that time, almost one-half of all mammal specimens in North America (defined as the United States and Canada) were housed in the United States National Museum of Natural History in Washington, D. C. (by comparison, the United States National Museum of Natural History presently holds ca. 15% of all specimens from North America).

More than 2 decades after Howell's (1923) publication, results of the second survey of collections appeared in the *Journal of Mammalogy* (Doutt et al., 1945). The authors of this report (J. Kenneth Doutt, A. B. Howell, and W. B. Davis) stated the following reasons for conducting their survey (Doutt et al., 1945:231):

"In preparing the list we have followed Howell's [1923] original plan to make it a roster of mammal collectors, as well as collections, and we hope that its effect may be to stimulate interest in the science of mammalogy, especially among young collectors."

By 1945, the mammal-collection resource had expanded to include 297 collections (Fig. 1), most of which contained <500 specimens. Although there was a pronounced trend away from private collections (52% were private collections in 1923, compared with 38% in 1945), the bulk of the mammalian material was still contained in a few, large collections. For example, the United States National Museum of Natural History still held ca. 25% of all mammal specimens in North America. Although Doutt et al. (1945) attempted to include Latin American collections in their survey, they received no replies from Mexican or Central American colleagues, and only a single response from South America (Escuela Agricola in El Vergel, Angol, Chile). Thus, the Doutt et al. (1945) report, like its predecessor (Howell, 1923), was restricted to the United States and Canada.

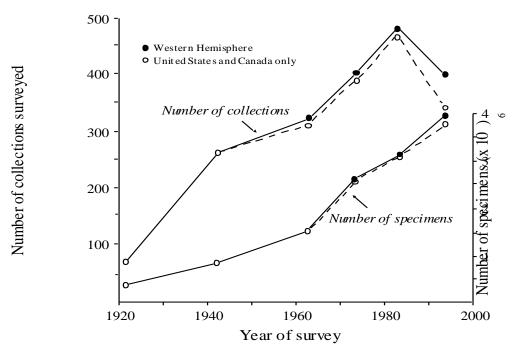


FIG. 1.—Historical trends in number of mammal collections and number of specimens in the collections (1922-1996).

The third survey of mammal collections in North America was conducted by Sydney Anderson, J. Kenneth Doutt, and James S. Findley in 1961 (published in the *Journal of Mammalogy* in 1963). By 1960, the ASM was well established as a professional organization, so the goals of the collection survey shifted somewhat from recruitment of new mammalogists to use of collections and documentation of the history of the discipline (Anderson et al., 1963:473):

"It is hoped that the information here compiled will aid students of mammals in using the collections and will, together with the prior surveys, help document the history of North American mammalogy."

The Anderson et al. (1963) report was based on information from 307 collections in the United States and Canada. The trend away from private, or personal, collections continued (only 14% of the collections were considered private in 1963), as did the trend toward decentralization of the resource (for example, by 1963, the United States National Museum of Natural History contained <20% of all specimens in North America). Two Latin American collections were listed in the Anderson et al. (1963) report (Museo Nacional in San José, Costa Rica and Instituto de Biología in Mexico City), and the authors noted that they had information from 12 collections on other continents.

Jerry R. Choate and Hugh H. Genoways conducted the fourth survey of North American mammal collections on behalf of the ASM in 1973. Their report, published in the *Journal of Mammalogy* in 1975, was part of a larger ASM effort (funded, in part, by the National Science Foundation) to plan for future use and protection of systematic resources in mammalogy. The report included information on 388 collections, only 36 of which (9%) were privately held. The time period covered by the Choate and Genoways report (1963-1973) witnessed rapid growth in number of mammal collections in North America and record growth in terms of number of specimens in those collections (Fig. 1). Again, only two Latin American collections were included in the 1975 listing, both from Mexico.

In 1981, Hugh H. Genoways and Duane A. Schlitter conducted the first worldwide survey of collections of mammals (exclusive of Canada and the United States). This report listed 321 collections from 76 countries, which together held ca. 80% of all mammal specimens outside of the United States and Canada. Importantly, the Genoways and Schlitter (1981) report included the most comprehensive list of Latin American collections to date (51 collections from 14 countries). This list of Latin American collections served as the starting point for the current survey of Central and South American collections.

Mammal collections in North America were again surveyed in 1983 by Terry L. Yates, William R. Barber, and David M. Armstrong. Their report, published as a supplement to Volume 68 of the *Journal of Mammalogy* (1987), contained information on 474 collections, five of which were from Latin America (one from Costa Rica and four from Mexico), and one from the Caribbean (Jamaica). Part of the mission of the Yates et al. (1987:1) survey was to "accumulate data in an electronic database that would allow for ready revision in future years." Unfortunately, the relatively primitive computer technology available in the early 1980s rendered the Yates et al. electronic database of little use in the present survey. However, the Yates et al. (1987) survey was the first to solicit information about computerization of mammal collections in North America, a trend that has increased rapidly over the past decade.

THE PRESENT SURVEY

Purpose.—This survey was designed to: 1) provide a comprehensive directory of collections of Recent mammals in the Western Hemisphere; 2) document the nature and extent of the holdings of these collections; 3) assess current curatorial practices, including those related to information retrieval; 4) compare current data with those reported in previous surveys to identify long-term trends; 5) assess the overall "health" of the resource, and use this information, plus long-term trends, to forecast the probable future of this resource over the next decade. The results of the survey will be available both in hard copy (this publication) and electronically (the ASM home page address is http://wkuweb1.wku.edu/~asm/). It is anticipated that all aspects of future collection surveys, including solicitation of information and distribution of results, will be conducted via the Internet.

Scope.—The present survey contains information gathered between December 1994 and December 1995, with numerous updates to June 1996. Initially, the survey was designed to include only North American collections (i.e., Canada, Mexico, and the United States). However, several members of the Systematic Collections committee had direct research connections and collaborators in Central and South America and were aware of the growing number of collections of mammals that existed south of Mexico. After considerable discussion, the survey team decided that it was now time to expand the survey to include all of the Americas (in keeping with our Society's name: American Society of Mammalogists) and that future accreditation of Latin American collections required that they, first, be located and, second, be recognized formally as part of the mammal-collection resource base of the Western Hemisphere. Accordingly, at its 75th-anniversary meeting in Washington, D. C. (June 1994), the ASM Board of Directors voted to expand the survey to cover all of the Western Hemisphere. Although the coverage of collections in the current report, especially collections in South America, certainly is not exhaustive, we hope that our effort to identify Latin American resources in mammalogy will encourage curators of collections not on the list to contact a member of the survey team so that the next collection survey will be even more comprehensive. Further, we recommend that the next decennial survey of mammal collections, scheduled for 2007, expand to include worldwide coverage. The pioneering global survey by Genoways and Schlitter (1981), plus continued advances in worldwide communication capabilities, should facilitate the work of the next survey team.

Survey questionnaire.—A nine-page questionnaire (a copy of which can be obtained from any of the authors) was sent to all collections listed in Yates et al. (1987) and all Latin American collections listed in Genoways and Schlitter (1981). The questionnaire was modified from that used by Yates et al. (1987) to include additional and updated questions about curatorial practices, collection computerization, and collection accreditation. The questionnaire was available in both English and Spanish.

Response.—In total, 276 of 464 questionnaires mailed to Canadian and United States collections were returned (59% return rate), and 62 of 184 questionnaires mailed to Latin American collections were returned (34% return rate). The high rate of return for Canadian and United States collections was due largely to the efforts of members of the ASM Systematic Collections Committee, each of whom made numerous follow-up contacts to encourage collection curators to return their questionnaires. Of the 51 collections in North America containing ≥10,000 specimens in 1983, all but one responded to the present survey.

The survey team is aware of several Latin American collections that did not respond to the survey, despite repeated attempts by the survey team to solicit a response. The names and addresses of these collections (data from Genoways and Schlitter, 1981; and Péfaur, 1987) are listed in Appendix I. It is hoped that these collections will be included in the next collection survey. Information about several of the Latin American collections was obtained directly from the Sociedad Argentina para el Estudio de los Mamíferos and the Asociación Mexicana de Mastozoología, A. C. We appreciate the assistance of our sister societies in Latin America.

Several collections that were listed as separate collections in previous surveys are now part of other collections. A list of collections that have been integrated into other collections since 1983 is given in Appendix II.

Number and geographic distribution of collections.—Overall, 391 collections are included in this report, of which 329 are from Canada and the United States, and 62 are from Mexico, Central America, and South America (Fig. 2). This represents an apparent 18% reduction in total number of North American collections during the past decade (Fig. 1). This reduction, however, is likely an artifact caused by inclusion of a large number of defunct collections in the Yates et al. (1987) list. For example, in the present report, no collections are listed that reported "no specimens," and collections that failed to respond both to this survey and to the previous survey were considered defunct and dropped from the list (importantly, no collection was dropped without repeated attempts to contact the collection curator by telephone and mail). Thus, the 1987 list, which

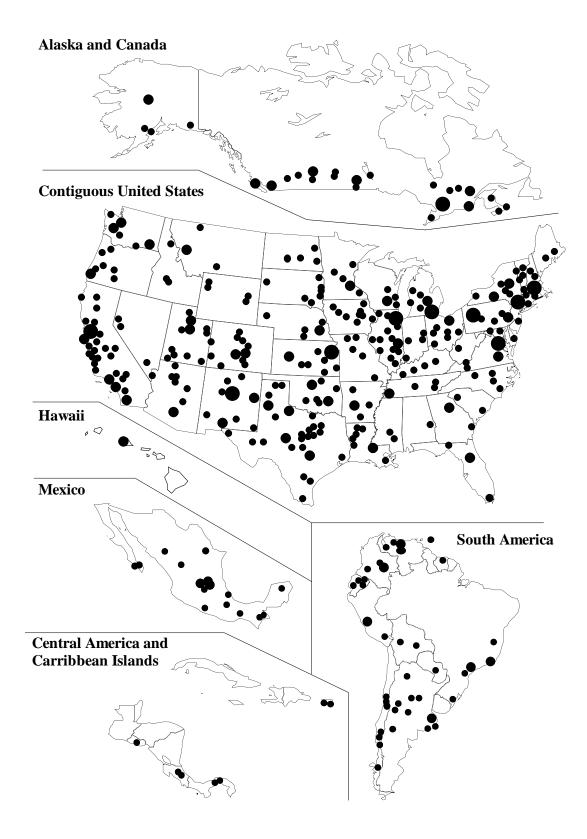


FIG. 2.—Location of mammal collections in the Western Hemisphere. Small dots represent collections with <10,000 specimens, medium dots show collections with 10,000-100,000 specimens, and large dots show location of collections with >100,000 specimens. Maps are drawn to different scales.

included a record 474 collections, may have been an over-estimate of the total number of actual collections of Recent mammals in North America. Nevertheless, it is clear that the long-term trend toward increase in number of mammal collections has either slowed or reversed (Fig. 1). If we assume that the Choate and Genoways (1975) survey also was a slight over-estimate of the number of collections, then it appears that growth of new collections has leveled-off at ca. 350 collections in North America (Canada, United States, and Mexico). Sixty-nine of the 345 North American collections included in the present list responded to the previous survey (Yates et al., 1987), but did not respond to the present survey, despite repeated attempts to contact collection curators by telephone and mail. Although these collections are included in the present directory, it is likely that many of them no longer exist as separate collections. Data reported for these collections were taken directly from Yates et al. (1987).

Number of specimens and their distribution.—The 391 collections included in this report contain a total of 4,194,305 specimens, of which 264,327 (6%) are presently uncatalogued. Collections in Canada and the United States contain a total of 3,806,557 specimens, which is a record number of specimens (Fig. 1), and represents a 21% increase in collection holdings during the past decade. This rate of growth contrasts sharply with the 57% rate of growth observed between 1963 and 1973 (Choate and Genoways, 1975) and the 24% rate of growth between 1973 and 1983 (Yates et al., 1987). However, in terms of absolute number of specimens, the decrease in rate of growth is less dramatic: ca. 900,000 specimens were added to United States and Canadian collections of mammals during 1963-1973 (90,000/year), 600,000 specimens were added during 1973-1983 (60,000/year), and 670,000 during 1983-1995 (56,000/year).

Of the 340 collections in Canada, United States, and Mexico for which size of collection is known, 150 (44%) contain <1,000 specimens, 132 (39%) contain 1,000-10,000 specimens, 49 (14%) contain 10,000-100,000 specimens, and 9 (3%) contain >100,000 specimens. Despite lack of growth in terms of overall number of collections during the past decade, the number of collections with ≥10,000 specimens has increased from 51 (Yates et al., 1987) to 58 collections at present. Most of these larger collections are located in the United States, where they are fairly evenly distributed throughout the nation (Fig. 2).

The 20 largest collections in the Western Hemisphere (Table 1) together contain 61% of all mammal specimens in the Western Hemisphere. The 10 largest collections, all of which are located in North America, together hold a total of 49.4% of North American specimens. This is a slight decrease compared to the 1987 value (53.1%), and is well below the 1975 value (57.1%). These data indicate that the reduced rate of growth in terms of number of collections in North America (Fig. 1) is not being accompanied by a "clumping" of specimens into the larger collections. In fact, the largest collection in the Western Hemisphere, the United States National Museum of Natural History, presently contains proportionally fewer specimens (15% of all specimens in North America) than it did in 1983 (17.5%) and 1973 (18.7%).

Taxonomic and geographic representation.—More than one-half (52.1%) of all specimens contained in collections of mammals in the Western Hemisphere are representatives of the order Rodentia (Fig. 3). This taxonomic bias was expected, considering that rodents are common, easy to collect and prepare, and relatively inexpensive to store because of their small size. Members of the orders Carnivora (14%), Chiroptera (9.3%), and Insectivora (8.4%) are fairly common in collections, as are

TABLE 1.—Specimen holdings in the 20 largest mammal collections in the Western Hemisphere.

Collection	Number of specimens 1995	Number of specimens 1975	Mean growth per year 1975-1995	Number of holotypes 1975/1995
1. United States National Museum of Natural				
History (USNM)	585,000	475,000	5,500	3,000/3,336
2. American Museum of Natural History (AMNH)	277,480	240,000	1,874	950/1,062
3. University of California, Berkeley, Museum of	,	- ,	,	, , , , , ,
Vertebrate Zoology (MVZ)	187,500	144,000	2,175	330/357
4. Field Museum (FMNH)	156,400	110,000	2,283	484/414
5. University of Kansas, Museum of Natural	,	,	,	
History (KU)	156,000	132,000	1,200	118/129
6. University of Michigan, Museum of	,	ŕ	•	
Zoology (UMMZ)	138,517	111,800	1,336	122/122
7. University of New Mexico, Museum of	•	·	·	
Southwestern Biology (MSB)	116,000	35,000	4,050	1/5 ^a
8. Carnegie Museum of Natural History (CM)	113,994	55,000	2,950	30/31
9. Royal Ontario Museum (ROM)	100,000	68,360	1,582	8/13
10. Natural History Museum of Los Angeles				
County (LACM)	97,000	43,000	2,700	22/22
11. Museu Nacional, Rio de Janeiro, Brazil (MN)	90,000			/b
12. Harvard University, Museum of Comparative				
Zoology (MCZ)	72,000	69,000	150	315/322
13. The Museum, Texas Tech University (TTU)	70,000	23,000	2,350	6/13
14. University of Illinois, Museum of Natural				
History (UIMNH)	61,063	48,701	618	20/20
15. Texas A&M University, Texas Cooperative				
Wildlife Collection (TCWC)	56,500	27,000	1,475	39/39
16. Canadian Museum of Nature (CMN)	53,000	42,500	525	61/58
17. The Science Museum of Minnesota (SMM)	45,513°	10,000	1,775	0/0
18. University of Washington, Burke Memorial				
Washington State Museum (UWBM)	40,000	7,400	1,630	0/1
19. Escuela Nacional de Ciencias Biologicas (ENCB)	38,400			/3
20. Louisiana State University, Museum of Natural				
Science (LSUMZ)	37,945	18,518	971	23/23

^a MSB also holds 73 symbiotypes (host specimens from which a parasite holotype is collected—see Frey et al., 1992).

b MN contains several holotype specimens (number not specified)
c SMM specimens are not catalogued

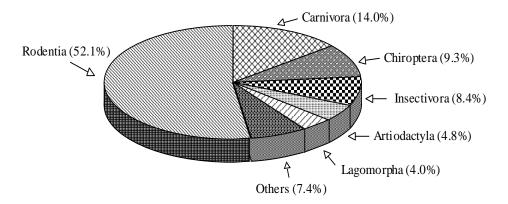


FIG. 3.—Taxonomic representation of mammal specimens in collections of the Western Hemisphere.

artiodactyls (4.8%) and lagomorphs (4%). Other orders are only poorly represented, especially when viewed as a percentage of the total number of specimens in all collections. It should be noted, however, that certain collections have outstanding holdings of specimens in orders not listed above; these special holdings are usually mentioned in the individual listing for that collection (see Directory of Collections).

About 82% of all specimens in collections were collected in the United States (Fig. 4). Only 8% of the specimens are from Canada, 3% are from Central and South America, and 2% are from Mexico.

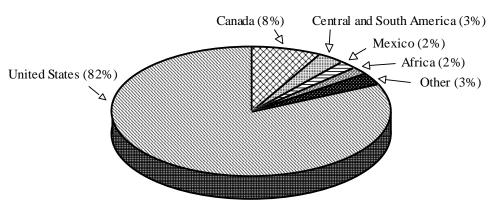


FIG. 4.—Geographic representation of mammal specimens in collections of the Western Hemisphere.

Special preparations and ancillary collections.—A large number of respondents reported that their collections contain special preparations, including fluid-preserved specimens, cleared-and-stained specimens, taxidermy mounts, parasites, specimens of known age, and specimens of domestic mammals. Significant holdings of special preparations are listed in the individual entries in the collection directory. Despite the fact that fewer individual specimens were added to collections during the past decade than in previous decades (Fig. 1), the total number of special preparations in collections increased dramatically since the previous survey (Table 2). In particular, collections of frozen tissues and mammalian parasites experienced explosive growth during the past decade. Of special concern is the growing number of taxidermy specimens (including trophy heads) accumulating in mammal collections in the Western Hemisphere. Although these specimens are valuable (in many cases, irreplaceable) and certainly are useful for exhibit purposes, they are expensive to store because of their large size, and they have limited research and teaching value. During the next decade, collection managers will need to grapple with the issue of how best to preserve and use taxidermy specimens.

Certain kinds of ancillary data, such as photographs and tape recordings of mammals, are not maintained routinely in most mammal collections. For example, only 21% of collections in the United States reported that they maintain photographs of specimens, and only 12% maintain photographs of habitats. Photomicrographs (3%), tape recordings (3%), motion pictures and videos (8%), and X-ray photographs (6%) are even rarer in collections of mammals in the United States. In some instances (e.g., tape recordings, tissues, and parasites), these materials routinely are deposited in specialty collections not associated directly with the traditional mammal collection (Gannon and Foster, 1996); hence, these materials exist, but are no longer reported in the survey response from the mammal collection.

TABLE 2.—Special preparations contained in mammal collections in the Western Hemisphere.

Special preparation	Number of specimens reported (this survey)	Number of specimens reported (1987 survey)	Net growth	
Fluid-preserved specimens	651,644	226,472	188% increase	
Cleared-and-stained specimens	2,997	326	819% increase	
Frozen tissues	473,614	21,300	2,123% increase	
Taxidermy specimens	30,093	5,243	474% increase	
Mammalian parasites	24,943	1,242	1,908% increase	
Domestic mammals	6,132	3,531	74% increase	
Specimens of known age	39,051	11,715	233% increase	

Frozen-tissue collections.—Increased use of molecular techniques has stimulated dramatic growth of frozen-tissue collections during the past decade (Dessauer et al., 1996; Table 2). Mammal collections in the Western Hemisphere currently maintain frozen tissues representing ca. 474,000 individual mammals. Nearly all of these tissue specimens are represented by traditional voucher specimens, which means that ca. 11% of all specimens in the traditional collections are represented by frozen tissues. Significant holdings of frozen tissues are mentioned in the individual listings in the collection directory. Especially large holdings of frozen tissues are contained in the following collections: MSB (85,000 specimens), TTU (70,000), UAM (17,000), CM (14,000), FMNH (10,000), MVZ (10,000), ROM (8,300), and LSUMZ (5,300). A worldwide directory of frozen-tissue collections is available in Dessauer et al. (1996).

Holotypes.—Mammal collections in the Western Hemisphere hold a total of 6,625 holotype specimens that are dispersed among 52 collections. North American collections currently hold 6,508 holotypes, which represents a 5% increase in number of holotypes since the last survey (Yates et al., 1987). About 51% of all holotype specimens in North America are contained in the USNM collection (down from 53% in 1987), and 90% of all holotypes in the Western Hemisphere are contained in the 20 largest collections (Table 1). Appendix III lists published catalogues of holotype specimens of mammals, and Appendix IV lists general publication series associated directly or indirectly with collections of mammals.

Use of collections.—When asked to identify the major purpose of their collection, 44% of the respondents listed teaching and education and 43% listed research as the primary goal of their collection (Fig. 5a). In nearly all instances, those who listed research as the primary goal of their collection, listed teaching and education as the secondary goal. When asked how their collections actually were used in a typical year, a larger percentage of respondents (58%) reported heavy emphasis on teaching and education, and only 26% reported that the major use of their collection was for research purposes (Fig. 5b).

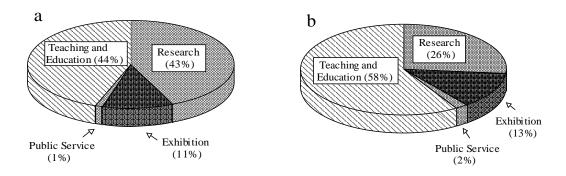


FIG. 5.—a) Primary goals of North American collections of mammals. b) Actual use of the collections.

Sources of support.—Nearly all collections surveyed reported multiple sources of support (Fig. 6). More than one-half (58%) of all mammal collections in the United States are supported directly by state government or, more commonly, through state-supported colleges and universities. A large number of collections depend on private donations, endowments, and federal or state grants and contracts for additional support. Although comparative data were not available from the previous survey, our impression is that sources of support have remained fairly constant during the past decade. The close association of many collections with colleges and universities underscores the immense educational value of this resource.

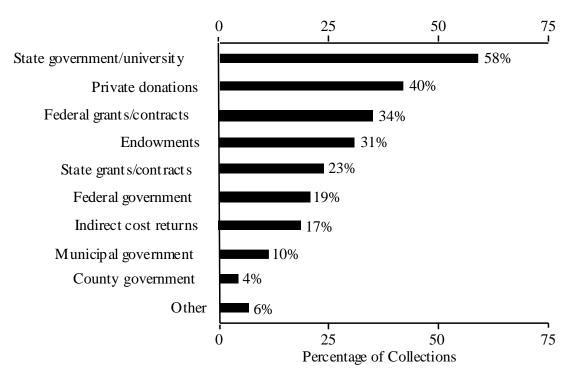


Fig.~6.—Sources of support for collections of mammals in the United States. The category "other" includes membership dues, gift shop revenues, admission charges, and similar sources of income. Percentages total >100% because most collections are supported by multiple sources .

Personnel.—Table 3 provides an overview of current support personnel in collections of mammals in the United States. About one-half of the collections are headed by a full- or part-time curator, most of whom are paid for their duties. One-quarter of the collections employ collection managers, nearly all of whom are paid for their work. About one-third of the collections employ paid hourly workers (usually students), and roughly the same percentage of collections rely on part-time volunteer labor. Other support positions are relatively uncommon in collections in the United States (Table 3). Although similar data were not reported for the previous survey (Yates et al., 1987), our impression is that persons with the formal title "curator" are becoming less common in mammal collections in the United States, whereas an increasing number of persons are being employed as collection managers. The potential ramifications of this trend are discussed by Cato (1991) and in the section of this report titled "Health of the resource."

TABLE 3.—Support personnel in collections in the United States.

_	Percentage of collec			
Position	Full time	Part time	Percentage paid	
Curator	29	36	76	
Assistant/Associate Curator	4	6	79	
Collection Manager	17	9	95	
Curatorial Assistant	2	12	8	
Technician	5	9	97	
Research Assistant	2	6	72	
Graduate Student	3	18	51	
Preparator	2	11	72	
Hourly worker	2	30	94	
Secretarial/Clerical	4	8	96	
Conservator	1	1	100	
Registrar	4	1	100	
Volunteer	1	32	0	

Curatorial standards and policies.—About 68% of all North American collections have standardized curatorial practices and policies. This value is unchanged from that reported in 1983 (Yates et al., 1987). However, in nearly two-thirds (66%) of these collections, curatorial practices and policies are now available in written form. This is a dramatic and welcome increase since the last survey, when only 32% of the collections reported that they had written policy documents.

Increased use of molecular techniques has caused an increase in requests for tissue samples taken directly from study skins (Engstrom et al., in press). Although the size of the tissue sample is typically small, this practice results in permanent damage to the skin. Consequently, curators should be judicious in granting permission for consumptive sampling of specimens in their care. Currently, only 14% of North American collections have written policies pertaining to consumptive sampling of their specimens. The ASM Systematic Collections committee has produced a document titled "Recommended policy for consumptive sampling of mammal specimens," which can be modified for use in all collections that currently lack a written policy in this important area.

Original field notes and collectors' catalogues are maintained routinely in ca. 60% of North American collections (up from 55% in 1983), and nearly one-half of the collections (43%) maintain

files of scientific collecting permits and related documents. This value (43%) is considerably larger than that reported in 1983 (31%), suggesting that collection managers are becoming increasingly aware of the importance of legal documentation of materials in their collections.

Catalogues.—About 80% of all North American collections maintain some form of collection catalogue. The percentage of North American collections maintaining written catalogues of their holdings has changed little since the previous collection survey (Yates et al., 1987). Presently, 67% of the collections maintain written numeric catalogues, 43% have written accession catalogues, 38% maintain written taxonomic catalogues, and 27% have written geographic catalogues.

An increasing number of collections have produced (or are in the process of producing) electronic (computerized) catalogues of their collection holdings (see following section on collection computerization). For example, 39% of collections in North America have computerized numeric catalogues, 30% have computerized taxonomic catalogues, 23% have computerized accession catalogues, and 21% have computerized geographic catalogues.

Only 61% of North American collections that maintain catalogues (whether written or computerized) also maintain some form of back-up system in the event of loss of the original catalogue or computer file. As more and more collections develop computerized catalogues, the frequency of back-up systems also should increase because of the ease of duplicating computer files.

Computerization.—Exactly one-half of all collections in Canada and the United States are computerized to some extent (up from 34% in 1983), and 37% of Latin American collections are wholly or partially computerized. Of the collections using computers for database management, 27% are completely computerized (i.e., all specimens are entered into the database) and 43% are at least one-half computerized. More than 30 different software applications are used to manage mammalcollection databases on a variety of computer platforms (e.g., DOS, Macintosh®, UNIX). About 40% of the computerized collections use 80486 IBM® (or IBM clone) computers running either dBase® or spreadsheet-type software (e.g., Lotus®, Excel®, or Paradox®). Some collections reported that they have migrated (or plan to migrate) to a UNIX-based system. It appears that most collections are using a standard language (SQL), which is important if the future trend in mammalogy is toward a unified system of collection databases accessible on one network, such as the World Wide Web (WWW). Use of Microsoft® applications has increased dramatically since the previous collection survey (Yates et al., 1987). It appears that many of the more active collections with large databases intend to migrate to more complex and encompassing applications (e.g., Oracle®), which allow use of a single database with simultaneous access by collection staff, collection users, and remote (WWW) users, all with limited (read only) access, but immediate database updates.

Protection of collections.—Table 4 lists the percentage of North American collections that are protected against various kinds of potential damage to specimens. As is obvious from Table 4, there has been a dramatic increase since 1983 in the percentage of collections protected against all listed sources of damage. Despite the generally high level of protection against the more common kinds of damage to specimens (e.g., fire and insect damage), only 13% of the collections have written disaster plans.

	Percentage of co			
Potential source of damage	This survey (1995)	Previous survey (1983)	Net change	
Fire	83	21	+62%	
Temperature fluctuation	58	16	+42%	
Humidity fluctuation	43	13	+30%	
Water damage	42	16	+26%	
Theft and vandalism	80	22	+58%	
Animal (insect) pests	88	24	+64%	
Mold and mildew	36	(not asked)		

TABLE 4.—Percentage of North American collections protected against various kinds of potential damage to specimens. Previous survey results are from Yates et al. (1987).

About 75% of all collections reported that they routinely monitor for presence of insects or insect damage. Use of chemical fumigants to protect against insect damage has declined from 63% of the collections in 1983 to 47% in 1995. In contrast, use of Integrated Pest Management practices (Albert and Albert, 1989) has increased from 18% of the collections in 1983 to 51% in 1995. Integrated Pest Management (IPM) is a program that minimizes use of pesticides for insect control. This approach targets the root of museum pest problems by concentrating on exclusion of pests from the premises altogether. IPM procedures are simple, cost effective, and a safe means of long-term control of pest infestations. Most IPM programs use the following protocol: 1) inspect for presence of pests; 2) deploy non-chemical control measures (usually sticky traps); 3) evaluate results; 4) if necessary, deploy chemical measures in a carefully specified manner; 5) re-evaluate results; 6) establish an ongoing monitoring program.

Respondents who use chemicals for pest control reported that they use of a wide variety of chemical fumigants, including ethylene dichloride, arsenic, ammonia vapor, carbon disulfide, carbon tetrachloride, carbon dioxide gas, paradichlorobenzene (moth balls and crystals), pyrethrins, vapona, and others. Many reported that they use a combination of chemical fumigants. Other forms of pest management included professional treatment of the collection area (or the entire building), freezing of incoming and outgoing specimens, and use of various kinds of "bug traps" (e.g., "bug zappers" and sticky traps).

Loans.—About 75% of collections in Canada and the United States and 39% of Latin American collections reported that they processed loans of mammal specimens in the 2 years prior to the survey (1993-1994). This value is considerably larger than that reported in the previous survey (Yates et al., 1987), when only 30% of North American collections reported loan activity. Although many more collections in Canada and the United States were involved in loan activity during 1993-1994, the actual number of loans was smaller (2,899 loans in 1993-1994, versus 3,828 loans in 1982-1983). Thus, the average number of loans per collection (considering only those collections that reported loan activity) was much smaller in 1993-1994 (11 loans/collection) than in 1982-1983 (26.4 loans/collection). The total number of specimens loaned by North American collections during 1993-1994 (37,181 specimens) was also lower than the total number of specimens loaned in 1982-1983 (ca. 48,000 specimens). Not surprisingly, most of the loan activity during 1993-1994 (81% of loans and 83% of specimens loaned) was concentrated in the 59 collections with holdings of >10,000 specimens.

Accreditation.—The ASM Systematic Collections committee is responsible for inspecting and accrediting collections of Recent mammals. The standards used to evaluate those collections are given in Appendix V. These standards were established to protect the collection resource, and the accreditation process was established to assist administrators of collections to meet the standards. Ideally, voucher specimens generated by researchers should be deposited only in accredited collections, where they will be curated properly and made available to the scientific community. Another advantage of accreditation is that the process, itself, can be influential in promoting the status of the collection under review, especially within one's own institution. Often, simple corrective measures recommended by the accreditation team can lead to vast improvements in operation of the collection and specimen care.

In 1995, the ASM Systematic Collections Committee announced a new accreditation procedure (termed "Initial Accreditation") through which Latin American collections could receive preliminary accreditation without a site visit by a member of the Systematic Collections Committee. This procedure was designed to circumvent the costs and logistical problems usually involved in site visits so as to accelerate the pace at which Latin American collections are accredited. Also, international recognition of a collection often assists the collection in terms of greater institutional support. Finally, recognition of Latin American collections makes them more visible for research use, both in the sense of specimen loans and deposition of voucher specimens. Procedures for Initial Accreditation differ from those for regular accreditation and are detailed in the *Journal of Mammalogy* (76:1302-1303, 1995).

Currently, there are 64 accredited collections (Appendix VI), and 60 additional collections have requested accreditation. Although this long waiting list will keep the Systematic Collections Committee busy well into the future, it is unfortunate that the remaining 264 collections have not expressed interest in accreditation. The administrators of all mammal collections, regardless of the size or location of the collection, should be aware of the many advantages of ASM accreditation, and all should attempt to meet or exceed the basic curatorial standards deemed acceptable by the ASM for proper long-term storage of specimens.

HEALTH OF THE RESOURCE

Our close examination of the survey data, coupled with verbal and written responses from people in charge of collections, leave us with the impression that mammal collections in the Western Hemisphere generally are in good health. This is not to say that all collections are in good condition, or that there is not room for improvement in most collections. However, the survey revealed several positive signs—plus a few causes for concern—about the future of mammal collections in the Western Hemisphere.

As discussed earlier, the apparent decline in number of collections (Fig. 1) is most likely an artifact of different survey methods in this and prior surveys. However, it is clear that new mammal collections are not appearing as rapidly as they did in the past, which we interpret as normal saturation (i.e., there are a limited number of institutions that can and will support collections), rather than decline of the resource base. Merger of several small and potentially vulnerable collections into a single larger collection, and donation of small collections to larger institutions also has contributed to this reduction in number of individual collections. However, these consolidations have strengthened the resource by safeguarding a larger number of specimens in secure repositories.

The questionnaire asked survey respondents if they expected any changes in their collection during the next 10 years. About one-half responded "no." Of those who responded "yes," ca. 80% gave generally optimistic responses about the future, and 20% gave neutral or negative responses. Included in the neutral responses were 8% of the respondents who stated that their collections probably would be merged with other small collections to form a larger unit, or that their collections would be donated to another institution. Most of the negative responses (5% of all respondents) came from curators who were retiring and were concerned about the future of their collections. In most instances, there was no guarantee that the curator would be replaced with a collection-oriented person. Finally, a small percentage of the respondents (3%) reported that their collection was in a state of decline.

Of the optimistic responses, 32% reported plans for general improvement of their facility, and 22% reported plans for a new building. An additional 16% indicated plans to hire a new curator or other collection personnel, and 14% said that activity in their collection was on the upswing. Finally, 7% of the respondents reported that increased funds for collection activities were either confirmed or anticipated in the next 10 years.

Although persons with the formal title of "curator" seem to be less common in collections than in previous decades, there has been a definite increase in the number of persons with the title "collection manager." We see this as a positive trend for mammal collections because essentially all collection managers have hands-on duties in their collections, whereas many curators have only administrative responsibility over their collection. Collection managers tend to have fewer duties outside of their curatorial obligations, which means that they have time to keep abreast of modern collection-management techniques, including Integrated Pest Management. This may explain the dramatic increase in use of IPM during the past 10 years, as well as the general increase in all other kinds of collection protection (Table 4).

During the next decade, we recommend that the ASM Systematic Collections committee take the following steps to further safeguard this important resource. First, we recommend that the committee contact those curators who indicated that their collections are at risk, and develop a plan to protect (or transfer) specimens in these collections. Second, we recommend that the committee increase its accreditation activities, and encourage more Latin American collections to use the Initial Accreditation procedure described above. Third, we recommend that the committee consider how best to handle the increasing number of taxidermy specimens in mammal collections. A carefully considered recommendation from the ASM would be extremely helpful to the many curators faced with growing numbers of taxidermy mounts in their care. Finally, we recommend that the committee work with collection curators to reduce or eliminate duplicated collection acronyms (see Appendix VII). Unique collection acronyms will help maintain order and consistency in the taxonomic literature pertaining to mammals.

ACKNOWLEDGMENTS

This survey would not have been possible without assistance from members of the ASM Systematic Collections Committee, which includes G. D. Baumgardner, A. C. Carmichael, P. S. Cato, J. R. Choate, J. A. Cook, M. D. Engstrom, D. J. Hafner, R. D. E. MacPhee, N. D. Moncrief, E. A. Rickart, M. E. Rutzmoser, and F. X. Villablanca. The authors also thank A. Brown, J. W. Demastes, L. Ellis, E. Roots, T. A. Spradling, C. Tapia, and M. Young for clerical and other valuable assistance. T. L. Best, K. T. Wilkins, and two anonymous reviewers provided many helpful comments on the manuscript, and R. M. Timm patiently guided us through the editorial process. We thank all of these colleagues for their kindness and consideration.

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Directory of Collections of Mammals in the Western Hemisphere

ARGENTINA

Instituto Argentino de Investigaciónes de las Zonas Aridas (IADIZA-CM)

Colección Mastozoológica Contact: Ricardo Ojeda Unidad de Zoología y Ecología Animal Voice: 54-61-287995 Casilla de Correo 507, FAX:54-61-287370

5500 Mendoza, Argentina E-mail:Rojeda@planet.losandes.com.arg

5,000 specimens; especially rodents and xenarthrans from the Monte Biome and the Argentinean Patagonia;

additional contacts: Virgilio Roig (ntcrycit@arcriba.edu.ar) and Ana M. Scollo

Museo Argentino de Ciencias Naturales "Bernandino Rivadavia" (MACN)

Colección de Mamíferos

Avenida Angel Gallardo 470

Casilla de Correo 220, suc. 5

Contact: Martha J. Piantanida

Voice: 54-1-9826595

FAX: 54-1-9824494

1405 Buenos Aires, Argentina E-mail: postmaster@mastoz.edu.ar

20,566 specimens; primarily mammals of Argentina, however other South American countries

also are represented; additional contact: Olga Vaccaro

Museo de Ciencias Naturales y Antropológicas "Prof. Juan C. Moyano" (MJCM)

Colección de Mamíferos Contact: Kett Bohm de Saurina

Plaza de la Independencia 5500 Mendoza, Argentina

597 specimens; primarily mammals from northcentral Argentina

Museo de Ciencias Naturales y Antropológicas "Prof. A. Serrano" (CMCNA)

Colección Mastozoológica Contact: Juana Maria Barzanti

Avenida Rivadavia 462 3100 Entre Rios, Argentina

210 specimens; exclusively mammals from Argentina

Museo Florentino Ameghino, Colección de Mastozoología (MFA-ZV-M)

Sección Zoología de Vertebrados Contact: Edelvita Fioramonti Primera Junta 2859 - Primer Piso Voice and FAX: 54-42-523843

3000 Santa Fé, Argentina

615 specimens; primarily mammals of Argentina; additional contact: Carlos Virasoro

Museo de Mar del Plata (MMP)

Mastozoología Contact: Orlando A. Scaglia

Avenida Libertad 3000, Plaza España

Mar del Plata

7600 Buenos Aires, Argentina

3,000 specimens; mainly mammals of Argentina, but also from Uruguay and Brazil

Museo de La Plata (MLP)

Colección de Mamíferos Contact: Diego Verzi Departamento Científico, Zoología Vertebrados Voice: 54-21-257744 Museo de La Plata FAX: 54-21-257527

Paseo del Bosque E-mail: museo@isis.unlp.edu.ar

1900 La Plata, Argentina

2,000 specimens; mostly xenarthrans and rodents from the Pampean and Patagonian regions of Argentina; additional contact: Carlos Galliari (cailo@ilpla.edu.ar)

Museo Provincial de Historia Natural de La Pampa (RVP)

Colección de Mamíferos Contact: Sergio Tiranti Voice: 54-95-422693 Pellegrini 180, Santa Rosa

6300 La Pampa, Argentina

220 specimens; mostly rodents from the Province of La Pampa in westcentral Argentina; collection contains several chromosome slides

Universidad Nacional de Rio Cuarto, Colección de Mamíferos (CUNRC)

Estafeta Postal 9 Contact: Jaime J. Polop Rio Cuarto Voice: 54-586-33859 5800 Córdoba, Argentina FAX: 54-586-45980

2,100 specimens; mostly rodents from central Argentina E-mail: jpolop@unrccc.edu.ar

Universidad Nacional de Tucumán, Colección de Mamíferos Lillo (CML)

Facultad de Ciencias Naturales e Instituto Miguel Lillo Contact: Rubén Barquez Universidad Nacional de Tucumán Voice: 54-81-210944 Miguel Lillo 205 FAX: 54-81-210944

4000 Tucumán, Argentina

6,268 specimens; primarily mammals of northern Argentina; other Latin American countries also are represented

BOLIVIA

Colección Boliviana de Fauna (CBF)

Contact: Teresa Tarifa S. Mastozoología Calle 26, Cota-Cota Voice: 591-2-795364 Casilla de Correo 8706 FAX: 591-2-770876 La Paz, Bolivia E-mail: ttarifa@cbf.bo

3,765 specimens; exclusively mammals of Bolivia; additional contact: Nuria Bernal (e-mail: nbernal@cbf.bo); collection includes specimens formerly housed at the Museo Nacional de Historia Natural de Bolivia and the Colección de Vertebrados, Instituto de Ecología, Universidad Mayor de San Andrés

Museo de Historia Natural "Noel Kempff Mercado" (MNK)

Sección de Mastozoología Contact: Pamela Rebolledo Avenida Irala 565 Voice and FAX: 591-3-366574 Casilla de Correo 702 E-mail: museo-nk@uagrm.bo

Santa Cruz de la Sierra, Bolivia

2,000 specimens; collection emphasizes mammals of Santa Cruz Department; additional contact: Aida Torrico

BRAZIL

Museu de Biologia Mello Leitão (MBML)

Contact: Sergio Lucena Mendes Voice and FAX: 55-27-259-1182 29.650 Santa Teresa

Espiritu Santo, Brasil

2,100 specimens; emphasis on small mammals of Brazil; additional contact: Devanir Loss

Museu de Ciências Naturais (MCN)

Coleção de Mastozoologia Contact: Jorge Ferigolo Fundação Zoobotânica do Rio Grande do Sul Voice: 55-51-336-1511 FAX: 55-51-336-1778 Avenida Salvador França 1427

90.690 Porto Alegre Rio Grande do Sul, Brasil

2,962 specimens; emphasis on mammals of the states of Rio Grande do Sul and Ceará; additional contact: Cesar Jaeger Drehmer

Museu de Historia Natural "Capão de Imbuia" (MHNCI)

Seção de Mastozoologia Contact: Vanessa Guerra Persson

Rua Benedito Conceição 407

82.810-080 Curitiba Parana, Brasil

3,000 specimens; collection emphasizes rodents and bats of the state of Parana; additional contact: Michel Miretzki

Universidade Federal do Rio de Janeiro, Museu Nacional (MN)

Coleção de Mamiferos Contact: Luiz Flamarion de Oliveira

Museo Nacional Voice: 55-21-264-8262 Universidade Federal do Rio de Janeiro FAX: 55-21-254-4320

Quinta de Boa Vista, 20.940-040 E-mail: LFBOMN@omega.lncc.br

Rio de Janeiro, Brasil

 $90,000\ specimens;\ collection\ includes\ several\ holotypes;\ emphasis\ on\ Brazilian\ mammals,\ especially\ rodents\ and$

primates; additional contact: Joao Alves de Oliveira (jaoliv@omega.lncc.br)

Universidade de Sao Paulo, Museu de Zoologia (MZUSP)

Seção de Mamiferos Contact: Heraldo A. Britski Caixa Postal 7172, 01064-970 Voice: 55-11-274-2455 São Paulo, Brasil FAX: 55-11-274-3690

28,300 specimens; collection emphasizes Brazilian species

CANADA

ALBERTA

Banff Park Museum (BNP)

Banff Park Museum Collection

93 Banff Avenue

Contact: Maureen Peniuk
Voice: 403-762-1557 or 762-1558

P. O. Box 900 FAX: 403-762-3380

Banff, Alberta T0L 0C0, Canada E-mail: hsmanager@pksbnp.dots.doe.ca 118 specimens; primarily taxidermy mounts; regional emphasis (Rocky Mountains National Park); additional

contact: Michael Gair (voice: 403-762-1573; e-mail: collections@pksbnp.dots.doe.ca)

Provincial Museum of Alberta (PMA)

12845 - 102 Avenue Contact: Harold N. Bryant Edmonton, Alberta T5N 0M6, Canada Voice: 403-453-9186 FAX: 403-454-6629

11,074 specimens; regional emphasis (Alberta); additional contacts: Maggie Ballantyne and Margot Brunn (voice: 403-453-9191 and 403-453-9169); **ACCREDITED BY ASM (1985)**

University of Alberta, Museum of Zoology (UAMZ)

Mammal Collection Contact: (did not respond to survey)

University of Alberta

Edmonton, Alberta T6G 2E9, Canada

8,000 specimens at last report (Yates et al., 1987); ACCREDITED BY ASM (1985)

BRITISH COLUMBIA

Kelowna Museum (KM)

Mammal Collection

470 Queensway

Kelowna, British Columbia V1Y 6S7, Canada

Contact: Dan Bruce
Voice: 604-763-2417

FAX: 604-763-5722

750 specimens; includes former Dun-Waters Collection

Royal British Columbia Museum (RBCM)

(formerly British Columbia Provincial Museum, BCPM)Contact: David Nagorsen675 Belleville StreetVoice: 604-387-2933Victoria, British Columbia V8V 1X4, CanadaFAX: 604-387-5360

E-mail: dnagorsen@rbml01.rbcm. gov.bc.ca 18,500 specimens; collection includes 24 holotypes; regional emphasis (British Columbia); additional contact: Angela Beltane (voice: 604-387-2926; e-mail: ebeltane@rbml01.rbcm.gov.bc.ca); ACCREDITED BY ASM (1976)

University of British Columbia, Cowan Vertebrate Museum (UBC)

Department of Zoology
University of British Columbia
Voice: 604-822-4665
Vancouver, British Columbia V6T 1Z4, Canada
20,000 specimens; ACCREDITED BY ASM (1975)

Contact: Richard Cannings
Voice: 604-822-4665
FAX: 604-822-2416
E-mail: vetmus@bcu.ubc.ca

MANITOBA

Manitoba Museum of Man and Nature (MMMN)

190 Rupert Avenue Contact: Jack Dubois/R. Puttenham

Winnipeg, Manitoba R3B 0N2, Canada Voice: 204-988-0659 FAX: 204-942-3679

19,000 specimens; regional emphasis; includes former collections of Delta Waterfowl Research Station, Atomic Energy of Canada Limited, Whiteshell Nuclear Research Establishment (WNRE), and University of Manitoba Zoological Museum (UMAN, part); additional contact: Janis Klapecki (voice: 204-988-0620)

Riding Mountain National Park (RMNP)

Wasagaming, Manitoba R0J 2H0, Canada Contact: Head, Resource Management

Voice: 204-848-7222 Collection size not reported; local emphasis FAX: 204-848-2866

University of Manitoba, Zoological Collection (UMAN)

Department of Zoology
University of Manitoba
Contact: William O. Pruitt, Jr.
Voice: 204-474-9683

Winnipeg, Manitoba R3T 2N2, Canada FAX: 204-275-6352

E-mail: pruitt@bldgduff.lan1.umanitoba.ca

300 specimens; used for teaching only; all scientific specimens were donated to the Manitoba Museum of Man and Nature (MMMN)

NEW BRUNSWICK

New Brunswick Museum (NBM)

277 Douglas Avenue Contact: Donald F. McAlpine Saint John, New Brunswick E2K 1E5, Canada Voice: 506-643-2345 FAX: 506-643-2360

6,000 specimens; regional emphasis (New Brunswick); good cetacean holdings; includes former N. Rae Brown Collection (NRBC)

NOVA SCOTIA

Acadia University, Wildlife Museum (AUW)

Department of Biology
Acadia University
Voice: 902-542-2201
Wolfville, Nova Scotia B0P 1X0, Canada
FAX: 902-542-3466
E-mail: dadswel@acadiau.ca

2,100 specimens; former collection acronym: AUM; additional contact: Ian MacDonald

Nova Scotia Museum of Natural History (NSM)

1747 Summer Street Contact: Frederick Scott
Halifax, Nova Scotia B3H 3A6, Canada Voice: 902-424-7370
FAX: 902-424-0560

1,980 specimens; additional contact: Alex Wilson E-mail: can-nsmz@immedia.ca

ONTARIO

Algonquin Park Museum (APM)

(formerly Algonquin Provincial Park, APP)Contact: Dan StricklandAlgonquin Park Visitor CenterVoice: 613-637-2828Ministry of Natural Resources, Box 219FAX: 613-637-2138

Whitney, Ontario K0J 2M0, Canada E-mail: strickdd@epo.gov.on.ca

354 specimens at last report (Yates et al., 1987); local emphasis (Algonquin Park); additional contact: Ron Tozer (e-mail: tozerrr@eno gov on ca)

mail: tozerrr@epo.gov.on.ca)

Canadian Museum of Nature (CMN)

(formerly National Museum of Natural Sciences, NMC)Contact: Darlene BalkwillMammal CollectionVoice: 613-952-0827P. O. Box 3443 Station "D"FAX: 613-954-6439

Ottawa, Ontario K1P 6P4, Canada E-mail: dbalkwill@mus-nature.ca

53,000 specimens; collection includes 58 holotypes; significant holdings of Canadian species, Nearctic species, and North Atlantic cetaceans; includes former Wistar Institute Collection (part), C. H. Buckner Collection, Leo Jobin Collection, Arthur Martel Collection, and the collection of the Arctic Biological Station; additional contact: David Campbell (voice: 613-954-4949; e-mail: dcampbell@mus-nature.ca); ACCREDITED BY ASM (1975 and 1987)

Carleton University, Museum of Zoology (CUMZ)

Department of Biology

Carleton University

Voice: 613-788-2600

FAX: 613-788-4497

Ottawa, Ontario K1S 5B6, Canada

12,000 specimens; includes Donald A. Smith Collection

Ministry of Natural Resources (MNR)

Wildlife Resources

P. O. Box 5000

Maple, Ontario L6A 1S9, Canada

Contact: Ed Addison
Voice: 905-832-7124
FAX: 905-832-7149

E-mail: addisoed@epo.gov.on.ca

2,419 specimens; primarily skeletal material of carnivores of Ontario

Rondeau Provincial Park (RPPMC)

Rural Route 1 Contact: Pamela Burns
Morpeth, Ontario NOP 1X0, Canada Voice: 519-674-1768

150 specimens; regional emphasis (southern Ontario) FAX: 519-674-1755

Royal Ontario Museum (ROM)

Department of Mammalogy
100 Queen's Park
Toronto, Ontario M5S 2C6, Canada

Contact: Mark D. Engstrom
Voice: 416-586-5769
FAX: 416-586-5863
E-mail: marke@rom.on.ca

100,000 specimens; collection includes 13 holotypes; significant holdings of mammals of Ontario and the northern Neotropics; comprehensive, worldwide collection of bats; frozen-tissue collection (8,300 specimens); includes former collections of O. J. Barton, J. G. Williams, R. G. Lanning, R. Mumford, and R. Brooman; additional contact: Judith L. Eger (voice: 416-586-5767; e-mail: judithe@rom.on.ca); ACCREDITED BY ASM (1975 and 1995)

University of Guelph (UGDZ)

Department of Zoology Contact: E. Graham Nancekivell

University of Guelph Voice: 519-824-4120 Guelph, Ontario N1G 2W1, Canada FAX: 519-767-1656

2,086 specimens; regional emphasis

QUEBEC

McGill University, Redpath Museum (RM) Contact: Delise Alison

859 Sherbrooke Street West Voice: 514-398-4092; FAX: 514-398-3185

Montreal, Quebec H3A 2K6, Canada

4,000 specimens; collection emphasizes small mammals of Quebec

Université Laval, Collection de Vertébrés (CVUL)

(formerly Musee Prorancher, MP)Contact: Jean-Marie PerronDepartment of BiologyVoice: 418-656-2497Laval UniversityFAX: 418-656-7925

Sainte-Foy, Quebec G1K 7P4, Canada 3,900 specimens, regional emphasis

SASKATCHEWAN

Royal Saskatchewan Museum (RSM)

(formerly Saskatchewan Museum of Natural History, SMNH)

Contact: David Baron
Voice: 306-787-2814

Regina, Saskatchewan S4P 3V7, Canada FAX: 306-787-2645

3,200 specimens; regional emphasis (mammals of Saskatchewan)

University of Regina (USRC)

Biology Department Contact: D. M. Secoy University of Regina Voice: 306-585-4231 Regina, Saskatchewan S45 0A2, Canada FAX: 306-585-4894

250 specimens at last report (Yates et al., 1987); collection used for teaching only

CHILE

Museo de Historia Natural de Concepción (MHNC)

Colección Mastozoológica Contact: Juan Franklin Troncoso Maipú 2359 Voice and FAX: 56-41-310932

Casilla de Correo 1054 Concepción, Chile

123 specimens, mostly taxidermy displays

Museo de Historia Natural de Valparaiso (MHNV)

Colección de Mamíferos Contact: Sergio Zunino Tapia

Condell 1546 Voice: 56-32-257441
Casilla 3208 Correo 3 FAX: 56-32-213375
Valparaiso, Chile

1,270 specimens; mostly rodents and lagomorphs of Chile

Museo Nacional de Historia Natural (MNHN)

Sección Zoología Contact: Jose Yañez
Casilla 787 Voice: 56-2-6814095
Santiago de Chile, Chile FAX: 56-2-6817182

1,633 specimens; collection includes 18 holotypes; exclusively Chilean mammals

Universidad Austral de Chile, Instituto de Ecología y Evolución (IEEUACH)

Colección de Mamíferos Contact: Milton H. Gallardo Casilla 567 Voice: 56-63-221469 Universidad Austral de Chile FAX: 56-63-221344

Valdivia, Chile E-mail: mgallard@valdivia.uca.uach.cl 5,940 specimens; mostly rodents from central and southern Chile; chromosomal preparations (1,500) and frozen tissues (500)

Universidad de Chile, Laboratorio de Citogenética de Mamíferos (LCM)

Departamento de Biología y Genética

Facultad de Medicina

Universidad de Chile

Contact: Angel Spotorno
Voice: 56-2-6786469

FAX: 56-2-7373158

Independencia 1027, Casilla 6556, Medicina Norte E-mail: aspotorn@med.uchile.cl

Santiago 7, Chile

1,900 specimens; collection emphasizes Chilean rodents; frozen tissues (100); chromosomal preparations (several hundred); additional contact: Laura Walker

Universidad de Concepción, Museo de Zoología (MZUC)

Departamento de Zoología Contact: Viviane Jerez Facultad de Ciencias Naturales y Oceanográficas Voice: 56-41-204965 Universidad de Concepción FAX: 56-41-2448805

Casilla 2407 E-mail: mzuc@halcon.dpi.udec.cl

Concepción, Chile

1,100 specimens; exclusively mammals of Chile; a new Museum of Natural Sciences will house this collection in 1997 (street address probably will change); additional contact: José Artigas (voice: 56-41-204152; e-mail: jartigas@halcon.dpi.udec.cl)

Universidad de Magallanes, Instituto de la Patagonia (CZIP)

Colección Zoológica Contact: Claudio Venegas Sala "Enrique Ibar Sierra" Voice: 56-61-217173 Universidad de Magallanes FAX: 56-61-212973

Intituto de la Patagonia E-mail: cvenegas@aoniken.fc.umag.cl

Casilla 113-D, Punta Arena, Chile

1,259 specimens; mostly rodents from southern Chile

COLOMBIA

Instituto de Ciencias Naturales, Museo de Historia Natural (ICN)

Colección de Mamíferos

Museo de Historia Natural

Apartado 7495

Contact: Alberto Cadena

Voice: 571-268-4336

FAX: 571-268-2485

Santa Fé de Bogotá, Colombia

15,400 specimens; mostly small mammals of Colombia; additional contact: Cecilia Ramirez

La Unidad de Investigación "Federico Medem"-Inderena (IND-M)

Colección Mastozoológica Contact: Hernando Chirivi Gallego

Apartado Aéreo 13458 Voice: 571-286-0601 Santa Fé de Bogotá, Colombia FAX: 571-243-1850

7,250 specimens; collection includes two holotypes; collection is now part of the Instituto de Investigaciones Biologicas "Alexander von Humboldt" (Ministerio del Medio Ambiente); the address probably will change

Universidad del Valle, Colección de Mamíferos (UV)

Departamento de Biología

Universidad del Valle

Apartado Aereo 25360

Contact: Michael Alberico

Voice: 572-339-3243

AX: 572-339-2440

Cali, Colombia E-mail: alberico@biologia.univalle.edu.co

9,500 specimens; exclusively Colombian mammals, especially rodents, bats, and marsupials

COSTA RICA

Museo Nacional de Costa Rica (MNCR)

Colección de Mastozoología Contact: Bernal Rodriguez H.

Departamento de Historia Natural E-mail: rherrera@cariari.ucr.ac.cr

Apartado 749 San José, Costa Rica

300 specimens; collection emphasizes Costa Rican mammals; some old specimens with historic value

Universidad de Costa Rica, Museo de Zoología (MZUCR)

Colección de Mamíferos
Escuela de Biología
Universidad de Costa Rica
Contact: José Manuel Mora
Voice: 506-207-5544
FAX: 506-207-4216

San José, Costa Rica E-mail: jmmora@cariari.ucr.ac.cr

2,050 specimens; exclusively Costa Rican mammals

ECUADOR

Escuela Politécnica Nacional (EPN)

Colección de Vertebrados Contact: Luis Albuja
Calle Ladrón de Guevara e Isabel La Católica Voice: 593-2-507153
Apartado 17-01-2759 FAX: 593-2-567848

Quito, Ecuador E-mail: lalbuja@mail.epn.edu.ec 4,000 specimens, exclusively Ecuadorian mammals; some specimens are of special historical value

Museo de Ciencias Naturales, Colección "Gustavo Orcés" (MUGM)

Sección de Mastozoología

Contact: Windsor Aguirre

Museo de Ciencias Naturales Casilla 5404

Guayaquil, Ecuador 150 specimens; exclusively Ecuadorian mammals

Museo Ecuatoriano de Ciencias Naturales (MECN)

Colección de Mastozoología

Rumipamba 341 y Avenida de Los Shyris

Parque "La Carolina"

Contact: Igor Castro R.

Voice: 593-2-449825

FAX: 593-2-504-356

E-mail: museocn@jsacha.ecx.ec

Casilla 8976, suc. 7 Quito, Ecuador

665 specimens; exclusively Ecuadorian mammals; >70% are bats

Pontifica Universidad Católica del Ecuador, Museo de Zoología-Mamíferos (QCAZ)

Departamento de Ciencias Biológicas Contact: Luis Coloma Pontifica Universidad Católica del Ecuador Voice: 593-2-529250 Avenida 12 de Octubre (entre Patria y Veintemilla) FAX: 593-2-567117

Apartado 17-01-2184 E-mail: lcoloma@puce.edu.ec

Quito, Ecuador

1,300 specimens, mostly Ecuadorian mammals; collection address may change within the next 2 years

EL SALVADOR

Museo de Historia Natural de El Salvador (MHNES*)

Colección de Mastozoología Contact: Azalea de Granados

Calle Los Viveros (final), Colonia Nicaragua

Parque "Saburo Hirao" San Salvador, El Salvador

720 specimens; mostly mammals of El Salvador (*Tentative acronym assigned by the authors)

MEXICO

Centro Interdisciplinario de Estudios, Colección Mastozoológica (OAXM)

Apartado Postal 24-3, Oaxaca Contact: Emma Cisneros Voice: 52-951-70610 FAX: 52-951-70400

750 specimens; mostly rodents of Oaxaca; additional contact: Carlos Bonilla

Centro de Investigaciones Biológicas del Noroeste (CIB)

Colección de Mamíferos Contact: Patricia Cortez Calva Km 17.5 Carretera al Norte Voice: 52-112-53633

Apartado Postal 128

FAX: 52-112-53625

La Paz, Baja California Sur 23000, México

E-mail: pcortes@cibnor.conacyt.mx

1,100 specimens; mostly mammals of northwestern Mexico; frozen tissues (530 specimens); additional contact: Sergio Ticul Alvarez-Castañeda (sticul@cibnor.conacyt.mx)

El Colegio de la Frontera Sur (ECOSUR)

Carretera Panamericana y Periférico Sur
Apartado Postal 63
Contact: Dario Navarrete
Voice and FAX: 52-967-81884

29290 San Cristobal de las Casas

Chiapas, México

230 specimens; mostly local species; collection probably will merge with those of Instituto de Historia Natural del Gobierno de Chiapas (IHN), and therefore may change location

Escuela Nacional de Ciencias Biológicas (ENCB)

Colección de Mamíferos Contact: Ticul Alvarez

Instituto Politécnico Nacional Voice: 52-5-7296000, extension 62421

Plan de Ayala esquina prolongación Carpio FAX: 52-5-3963503

México, Distrito Federal 11340, México

38,400 specimens; exclusively Mexican mammals; additional contact: Juan Carlos Lopez Vidal

Instituto de Ciencias y Artes de Chiapas, Museo Zoológico (MZ-ICACH)

Calzada Samuel León Brindis 151 Contact: Matias Martinez Tuxtla Gutierrez, Chiapas 029000, México Voice: 52-961-21437 760 specimens; collection emphasizes local species FAX: 52-961-21957

Instituto Nacional de la Pesca (PNICMM-INP)

Colección Osteológica, Programa Nacional de Investigación Contact: Hector Perez Cortés

Voice: 52-112-52623

y Conservación de Mamíferos Marinos

Centro Regional de Investigación Pesquera de La Paz FAX: 52-112-30122

Km 1 Carretera a Pichilingüe La Paz, Baja California Sur, México

70 specimens; exclusively marine mammals from the Pacific Ocean

Instituto Politécnico Nacional, Colección Científica de Fauna Silvestre (CRD)

Centro Interdisciplinario de Investigación
Instituto Politécnico Nacional
Contact: Raul Muñiz Martínez
Voice and FAX: 52-186-50265

Unidad Durango, Zarco 106

Vicente Guerrero, Durango 34890, México

950 specimens; exclusively mammals from the state of Durango

Investigaciones Biológicas de la Universidad Veracruzana (IIBUV)

Colección Mastozoológica Contact: Alvar Gonzalez Christen km 2.5 en la Carretera Xalapa-Veracruz Voice and FAX: 52-125-7575

Apartado Postal 294

Xalapa, Veracruz 91190, México

2,350 specimens; mostly rodents and bats from the state of Veracruz

Universidad Autónoma de Aguascalientes (CZUAA)

Colección de Zoología Contact: Gilfredo de La Riva Avenida Universidad, Edificio 27 "A" Voice: 52-491-23345

Aguascalientes, México

Aguascalientes, México

AX: 52-491-43222

595 specimens; collection emphasizes regional mammals

Universidad Autónoma Metropolitana, Unidad Iztapalapa (UAMI)

Colección de Mamíferos

Avenida Michoacán y Calzada Purísima

Colonia Vicentina, México, Distrito Federal 04390, México

Colonia Vicentina, México, Distrito Federal 04390, México

Colonia Vicentina, México, Distrito Federal 04390, México

E-mail: jrp@xanum.uam.mx

13,197 specimens; mostly mammals of central Mexico; additional contact: Alondra Castro Campillo (e-mail: acc@xanum.uam.mx)

Universidad Autónoma de Tamaulipas, Instituto de Ecología y Alimentos (CM-IEA)

Colección de Mamíferos
Universidad Autónoma de Tamaulipas
Universidad Autónoma de Tamaulipas
Voice: 52-131-62721
FAX: 52-131-64289

Ciudad Victoria, Tamaulipas, México 300 specimens; mostly local mammals

Universidad Autónoma de Yucatán, Facultad de Medicina Veterinaria y Zootecnia (UAY*)

Colección de Mamíferos Contact: Silvia Hernandez
Universidad Autónoma de Yucatán Voice and FAX: 52-99-234009

Km 15.5 de la Carretera Mérida-Xmatkuil

Apartado Postal 4-116 Itzimná Mérida, Yucatán, México

220 specimens; collection emphasizes mammals from the state of Yucatán (*Tentative acronym assigned by the authors)

Universidad de Michoacán (CM-UMSNH)

Colección de Mastozoología Contact: Arturo Nuñez Garduño

Facultad de Biología Voice: 52-43-161766

Ciudad Universitaria, Edificio "B" (Planta alta)

Morelia, Michoacán

2,300 specimens; collection emphasizes local mammals

Universidad Nacional Autónoma de Baja California Sur (UABCS)

Colección de Mamíferos Contact: Emelio Brajau

Museo de Historia Nacional Voice: 52-112-12801, extension 133

Km 5.5 Carretera al Sur FAX: 52-112-12477

La Paz, Baja California Sur 23000, México

100 specimens; exclusively mammals from the state of Baja California Sur

Universidad Nacional Autónoma de México, Facultad de Ciencias (FCMM)

Colección de Mamíferos Marinos Contact: Luis Medrano

Universidad Nacional Autónoma de Mexico Voice: 52-5-6224913; FAX: 52-5-6224828 Apartado Postal 70-572 E-mail: lmg@hp.fciencias.unam.mx

México, Distrito Federal 04510, México

250 specimens; exclusively marine mammals; additional contact: Mario Salinas Z.

Universidad Nacional Autónoma de México, Instituto de Biología (IBUNAM)

Colección Nacional de Mamíferos

Departamento de Zoología

Apartado Postal 70-153

Contact: Fernando Cervantes

Voice: 52-5-6225706

FAX: 52-5-5500164

México, Distrito Federal 04510, México E-mail: fac@servidor.unam.mx 37,830 specimens; collection includes 11 holotypes; mostly Mexican mammals; frozen tissues (660 specimens);

additional contact: Yolanda Hortelano; ACCREDITED BY ASM (1975 and 1983)

NETHERLANDS ANTILLES

Christoffel Park Museum (CPM)

Carmabi Foundation Contact: Leon P. J. J. Pors Piscaderabaai Voice: 599-9-624242 P. O. Box 2090 FAX: 599-9-627680

Curação, Netherland Antilles

41 specimens; mostly deer; additional contact: Adolphe O. Debrot

PANAMA

Instituto Nacional de Cultura, Museo de Ciencias Naturales (INC*)

Colección de Mamíferos Nacionales y Extranjeros Contact: Nuria Esquivel de Barillas

Instituto Nacional de Cultura Voice: 507-250-645 Apartado 662 FAX: 507-250-646

Panama 1, Panama

86 specimens; collection used primarily for educational purposes (*Tentative acronym assigned by the authors)

Universidad de Panama, Museo de Vertebrados (CM-MVUP)

Colección de Mamíferos Contact: Victor Tejera N.

Departamento de Zoología

Facultad de Ciencias Naturales y Exactas

Apartado 6-2842 El Dorado, Panama

1,000 specimens; emphasis on small mammals of Panama

PARAGUAY

Museo Nacional de Historia Natural del Paraguay (MNHNP)

Ministerio de Agricultura y Ganaderia Contact: Isabel Gamarra de Fox

Sucursal 19-Campus Voice: 595-258-5208 Ciudad Universitaria-Central XI, Paraguay FAX: 595-249-5568

2,260 specimens; exclusively mammals of Paraguay

PERU

Universidad Nacional de San Agustin, Museo de Historia Natural (MUSA)

Avenida Aleidas Carreon Contact: Horacio Zeballos

Apartado Postal 1430 Arequipa, Peru

440 specimens; primarily mammals of southwestern Peru

Universidad Nacional de San Marcos, Museo de Historia Natural (MUSM)

Avenida Arenales 1256 Contact: Victor Pacheco Apartado 140434 Voice: 511-471-0117

Lima-14, Peru E-mail: vpacheco@musm.edu.pe 12,000 specimens; collection emphasizes Peruvian mammals; tissues preserved in alcohol (350 specimens);

additional contact: Elena Vivar (vivar@musm.edu.pe)

SURINAME

National Zoological Collection of Suriname (NZCS)

University of Suriname

P. O. Box 9212

Contact: Paul. E. Ouboter

Voice: 597-465558, extension 318

Paramaribo, Suriname FAX: 597-462291 390 specimens; mostly bats and rodents from Suriname; additional contact: Shamita A. Shadew

TRINIDAD AND TOBAGO

University of the West Indies (UWI*)

Department of Zoology University of the West Indies Saint Augustine, Trinidad Trinidad and Tobago

102 specimens; collection emphasizes regional mammals (*Tentative acronym assigned by authors)

UNITED STATES

ALABAMA

Auburn University Museum (AUM)

Department of Zoology and Wildlife Science

331 Funchess Hall

Auburn University, AL 36849-5414

Contact: Troy L. Best
Voice: 334-844-9260

FAX: 334-844-9234

E-mail: besttro@mail.auburn.edu

Contact: Savitree Rattan

1,500 specimens; primarily mammals of Alabama; former collection acronym: AU

University of South Alabama, Vertebrate Natural History Collection (USANHC)

Department of Biology
University of South Alabama
Voice: 334-460-6331
Mobile, AL 36688
FAX: 334-460-7357

989 specimens; fluid-preserved material (500 specimens); collection emphasizes local species; former collection

acronym: USA

ALASKA

Alaska Department of Fish and Game (AFGMC)

333 Raspberry Road Contact: Donald G. Calkins Anchorage, AK 99503 Voice: 907-267-2403

1,200 specimens; exclusively mammals of Alaska

Glacier Bay National Park and Preserve Museum (GBNM)

P. O. Box 140 Contact: Mary Beth Moss Gustavus, AK 99826-0140 Voice: 907-697-2230 FAX: 907-697-2654

96 specimens; collection emphasizes local species (Glacier Bay National Park and Preserve)

Pratt Museum (PM)

3779 Bartlett Street Contact: Elizabeth A. Webb Homer, AK 99603 Voice: 907-235-6077 FAX: 907-235-2764

530 specimens; skeletal material of whales; exclusively mammals from southcentral Alaska

University of Alaska Museum (UAM)

Mammal Collection Contact: Joseph A. Cook 907 Yukon Drive Voice: 907-474-6946 University of Alaska FAX: 907-474-5469

Fairbanks, AK 99775-6960 E-mail: ffjac@aurora.alaska.edu 38,000 specimens; includes collection formerly listed as Naval Arctic Research Laboratory (NARL); emphasis on mammals of Arctic and subarctic regions; phocine seals; frozen tissues (17,000 specimens); additional contact: Gordon Jarrell (voice: 907-474-6947; FAX: 907-474-5469; e-mail: fnghj@aurora.alaska.edu; ACCREDITED BY ASM (1975 and 1983)

ARIZONA

Arizona State University, Mammal Collection (ASUMC)

Department of Zoology Contact: Michael E. Douglas Arizona State University Voice: 520-965-3571 Tempe, AZ 85287-1501 FAX: 520-965-2519

E-mail: abmed@asuvm.inre.asu.edu

7,100 specimens; exclusively specimens from the United States

Grand Canyon National Park Museum Collection (GRCAMC)

(formerly Grand Canyon National Park Study Contact: Carolyn Richard Collection, GRCASC) Voice: 520-638-7769 FAX: 520-638-7797 P. O. Box 129

Grand Canyon, AZ 86023-0129

900 specimens; collection emphasizes mammals of Grand Canyon National Park; additional contacts: Colleen Hyde

and Kim Besom

Museum of Northern Arizona (MNA)

Route 4, Box 720 Contact: Michael Morales Flagstaff, AZ 86001 Voice: 520-774-5211 FAX: 520-779-1527

4,214 specimens; regional emphasis (Grand Canyon and Colorado Plateau); additional contact: Deb Hill (voice: 602-774-5211, extension 228; FAX: 602-779-1527)

Northern Arizona University, Museum of Vertebrates (NAUVM)

Department of Biological Sciences Contact: Gary C. Bateman Northern Arizona University Voice: 520-523-7237 Flagstaff, AZ 86011-5640 FAX: 520-523-7500

E-mail: gcb@nauvax.ucc.nau.edu 4,627 specimens; emphasis on small mammals of Arizona; also, Mexican and African bats; former collection acronym: NAU

Petrified Forest National Park (PFSS) Contact: David DeWitt Petrified Forest, AZ 86028 Voice: 520-524-6228 100 specimens; collection emphasizes local species FAX: 520-524-3567

Southwestern Research Station (SWRS)

Contact: Wade C. Sherbrooke American Museum of Natural History P. O. Box G Voice and FAX: 520-558-2396 Portal, AZ 85632

239 specimens; collection emphasizes local species

University of Arizona, Collection of Mammals (UA)

Department of Ecology and Evolutionary Biology
University of Arizona
Contact: Michael Nachman
Voice: 520-621-1303

Tucson, AZ 85721

27,683 specimens; collection emphasizes regional species, with particular strength in bats; additional contact: Yar

Petryszyn (voice: 602-621-7291); ACCREDITED BY ASM (1975 and 1982)

Walnut Canyon National Monument (WACA)

Walnut Canyon Road Contact: J. L. DeYoung Flagstaff, AZ 86004 Voice: 520-556-7040 62 specimens; collection emphasizes local species FAX: 520-556-7071

ARKANSAS

Arkansas State University, Collection of Recent Mammals (ASUMZ)

Department of Biological Sciences

Arkansas State University

State University, AR 72467-0599

Contact: V. Rick McDaniel
Voice: 501-972-3082
FAX: 501-972-2638

E-mail: vrmcdanl@quapaw.astate.edu

32,000 specimens; regional emphasis, with strengths in bats, insectivores, rodents, and carnivores; **ACCREDITED BY ASM** (1976)

71 ASM (1770)

Henderson State University, Museum of Zoology (HSUMZ)

Department of Biology Contact: Renn Tumlison Henderson State University Voice: 501-230-5152

Arkadelphia, AR 71999 E-mail: tumlison@holly.hsu.edu

419 specimens; collection emphasizes local species

University of Arkansas, Museum Zoological Collections (UAMZC)

(formerly University of Arkansas Department ofContact: Nancy G. McCartneyZoology, UADZ)Voice: 501-575-3456University MuseumFAX: 501-575-3846

University of Arkansas E-mail: nmccartn@saturn.uark.edu

Fayetteville, AR 72701

2,650 specimens; collection emphasizes regional species (primarily mammals of Arkansas)

University of Arkansas at Little Rock, Vertebrate Collection (UALRVC)

Department of Biology
University of Arkansas at Little Rock
Voice: 501-569-3511
Little Rock, AR 72204
FAX: 501-569-3271
E-mail: gaheidt@ualr.edu

6,200 specimens; local emphasis, with strengths in Dasypus, Mephitis, and Peromyscus; ACCREDITED BY ASM (1977)

CALIFORNIA

California Academy of Sciences (CAS)

Department of Ornithology and Mammalogy
California Academy of Sciences
Voice: 415-750-7177
Golden Gate Park
FAX: 415-750-7346

San Francisco, CA 94118 E-mail: kcebra@calacademy.org

23,953 specimens; includes the former Stanford University Collection; additional contact: Luis Baptista (voice: 415-

750-7178; e-mail: lbaptista@calacademy.org); ACCREDITED BY ASM (1975)

California Polytechnic State University, San Luis Obispo (CPSU)

Aryan I. Roest Mammal Collection Contact: V. L. Holland Biological Sciences Department Voice: 805-756-2789

California Polytechnic State University

San Luis Obispo, CA 93407

2,616 specimens; collection emphasizes local and regional species

California State Polytechnic University, Pomona (CSPUP)

Biological Sciences Department Contact: (did not respond to survey)

California State Polytechnic University

Pomona, CA 91768

976 specimens at last report (Yates et al., 1987)

California State University, Chico, Vertebrate Museum (CSUC)

Biology Department Contact: Raymond J. Barnett
California State University Voice: 916-898-5356

Chico, CA 95929

5,198 specimens; collection emphasizes mammals of northern California

California State University, Fresno (CSUF)

Department of Biology
California State University
Voice: 209-278-2696
Fresno, CA 93740-0073
FAX: 209-278-7139

3,900 specimens; local emphasis, with strengths in Dipodomys and Thomomys

California State University, Long Beach (CSULB)

Department of Biological Sciences

California State University

Long Beach, CA 90840-3702

E-mail: dhuckaby@csulb.edu

11,959 specimens; regional emphasis, including Mexico; additional contact: Anne Staskewicz (voice: 310-985-4883);

ACCREDITED BY ASM (1979, 1980)

California State University, Northridge (CSUN)

Department of Biology
California State University

Contact: (did not respond to survey)

Northridge, CA 91330 1,380 specimens at last report (Yates et al., 1987)

California State University, Turlock (CSCS)

Department of Biological Sciences Contact: (did not respond to survey)

California State University Turlock, CA 95380

1,000 specimens at last report (Yates et al., 1987)

Death Valley National Park (DEVA)

Museum Collection, Furnace Creek

National Park Service

P. O. Box 579

Contact: Blair Davenport

Voice: 619-786-2331

FAX: 619-786-3283

Death Valley, CA 92328 E-mail: blair_davenport@nps.gov

368 specimens; collection emphasizes local mammals (Death Valley)

Diablo Valley College Museum (DVCM)

Diablo Valley College Contact: Audrey Maher Kamprath

Pleasant Hill, CA 94523

455 specimens; additional contact: Jerry Underwood

Humboldt State University (HSU)

Vertebrate Museum

Department of Biological Sciences

Humboldt State University

Contact: Timothy E. Lawlor

Voice: 707-826-4410

FAX: 707-826-3201

Arcata, CA 95521 E-mail: lawlort@axe.humboldt.edu 7,200 specimens; collection emphasizes local species, plus mammals of the Great Basin; strong in marine mammals;

frozen tissues (1,000 specimens); ACCREDITED BY ASM (1984)

Lassen Volcanic National Park (LAVO)

P. O. Box 100 Contact: Scott Isaacson

Mineral, CA 96063 Voice: 916-595-4444

FAX: 916-595-3262

35 specimens; collection emphasizes local species; former collection acronym: LVNP

Monterey Peninsula College, Life Science Museum (MPC)

Monterey Peninsula College Contact: (did not respond to survey)

Monterey, CA 93953

71 specimens at last report (Yates et al., 1987)

Natural History Museum of Los Angeles County (LACM)

Section of Birds and Mammals

Natural History Museum of Los Angeles County

900 Exposition Boulevard

Contact: John E. Heyning
Voice: 213-763-3404

FAX: 213-746-2999

Los Angeles, CA 90007 E-mail: heying@mizar.usc.edu

97,000 specimens; collection includes 22 holotypes; noteworthy holdings of mammals of California, Costa Rica, and Africa; marine mammals; frozen tissues (2,500 specimens); includes collections formerly held by Western Foundation of Vertebrate Biology, California Institute of Technology (part), and University of Southern California; additional contact: Tom Lewis (voice: 213-585-3553); ACCREDITED BY ASM (1978)

Occidental College, Moore Laboratory of Zoology (MLZ)

Occidental College
Contact: John C. Hafner
1600 Campus Road
Voice: 213-259-2673
Los Angeles, CA 90041
FAX: 213-259-2887
E-mail: hafner@oxy.edu

1,737 specimens; strong Mexican holdings; includes former private collections of R. T. Moore and W. W. Brown; additional contact: James R. Northern (voice: 213-259-2659; e-mail: northern@oxy.edu)

Pacific Grove Museum of Natural History (PGMNH)

165 Forest Avenue Contact: P. M. Finnegan Pacific Grove, CA 93950 Voice: 408-648-3116

202 specimens; exclusively mammals of the United States

Pacific Union College, Museum of Natural History (PUCMNH)

Pacific Union College Contact: (did not respond to survey)

Angwin, CA 95408

1,000 specimens at last report (Yates et al., 1987)

Point Reyes National Seashore (PORE)

Superintendent Contact: John A. Dell'Osso Point Reyes National Seashore Voice: 415-663-8522 Point Reyes Station, CA 94956 FAX: 415-663-8132

E-mail: pore_interp@nps.gov 121 specimens; local emphasis (Point Reyes National Seashore); former collection acronym: PRNS

San Bernardino County Museum (SBCM)

Biological Science Division

2024 Orange Tree Lane

Redlands, CA 92374-2850

Contact: Robert McKernan

Voice: 909-798-8570

FAX 909-798-8585

7,670 specimens; emphasis on deserts and coastal plain of the southwestern United States; frozen tissue collection (1,000 specimens); contains former private collection of Harry Coombs

San Diego Natural History Museum (SDNHM)

Department of Birds and Mammals

P. O. Box 1390

San Diego, CA 92112

Contact: Philip Unitt
Voice: 619-232-3821

FAX: 619-232-0248

22,430 specimens; collection includes 89 holotypes; emphasis on Baja California, southern California, Oregon, Arizona, and Sonora; strong in marine mammals; contains former private collections of L. M. Huey and S. G. Jewett; ACCREDITED BY ASM (1975)

San Diego State University (SDSU)

Department of Biology

San Diego State University

San Diego, CA 92182

Contact: J. David Archibald

Voice: 619-594-6917

FAX: 619-594-5676

2,000 specimens; emphasis on local species and exotic zoo specimens; additional contact: Beverley Anderson-Abbs (voice: 619-594-4769; e-mail: banderso@sunstroke.sdsu.edu)

San Jose State University, Museum of Birds and Mammals (MBM)

Department of Biological Sciences

San Jose State University

San Jose, CA 95192-0100

Contact: John O. Matson
Voice: 408-924-4891
FAX: 408-924-4840

E-mail: matson@biomail.sjsu.edu 3,735 specimens; emphasis on local species; strong in marine mammals; contains collection formerly managed by the United States Geological Survey

Santa Barbara Museum of Natural History (SBMNH)

Mammal Collection Contact: Charles D. Woodhouse

Santa Barbara Museum of Natural History

Voice: 805-682-4711

2559 Puesta Del Sol

Santa Barbara, CA 93105

Voice: 805-682-4711

FAX: 805-569-3170

E-mail: vertzoo@rain.org

9,650 specimens; collection includes 24 holotypes; emphasis on mammals of central California; contains former private collection of Jack C. Von Bloeker, Jr. (part); additional contact: Paul W. Collins (voice: 805-682-4711, extension 321); ACCREDITED BY ASM (1986)

United States Forest Service, San Joaquin Experimental Range (SJER)

Coursegold, CA 93614 Contact: (did not respond to survey)

360 specimens at last report (Yates et al., 1987)

University of California, Berkeley, Museum of Vertebrate Zoology (MVZ)

3101 Valley Life Sciences Building Contact: James L. Patton University of California Voice: 510-642-3567 Berkeley, CA 94720 FAX: 510-643-8238

E-mail: patton@uclink.berkeley.edu

187,500 specimens; emphasis on mammals of California, western United States, Alaska, British Columbia, Mexico, El Salvador, Peru, Argentina, Australia, and New Guinea; frozen-tissue collection (10,000 specimens); contains former private collections of M. M. Greene, M. Hildebrand, and D. R. Dickey (El Salvador material only); additional contacts: Barbara R. Stein (e-mail: bstein@garnet. berkeley.edu), Eileen Lacey (email: ealacey@violet.berkeley.edu) and, for tissues, Carla Cicero (e-mail: carla@ucbcmsa.berkeley.edu); ACCREDITED BY ASM (1975)

University of California, Davis, Museum of Wildlife and Fisheries Biology (MWFB)

University of California Contact: Ronald E. Cole Davis, CA 95616 Voice: 916-752-0364 FAX: 916-752-4154

E-mail: recole@ucdavis.edu

Contact: (did not respond to survey)

6,000 specimens; contains collections formerly managed by University of California, Davis, Department of Zoology and University of California, Irvine

University of California, Hastings Natural History Reservation (HNHR)

38601 East Carmel Valley Road Contact: Mark R. Stromberg Voice: 408-659-2664 Carmel Valley, CA 93924 FAX: 408-659-3649

E-mail: stromber@violet.berkeley.edu 300 specimens; exclusively mammals of California

University of California, Los Angeles, Dickey Collection (UCLA)

Department of Biology Contact: W. J. Hillenius 405 Hilgard Voice: 310-825-1282 University of California FAX: 310-206-3987

Los Angeles, CA 90024-1606 E-mail: hillenius@biology.lifesci.ucla.edu 21,188 specimens; collection includes 48 holotypes; contains former private collections of D. R. Dickey, A. J. Van Rossem, A. B. Howell, and Loye Miller, and the former collection of the California Institute of Technology (part)

University of California, Santa Barbara, Santa Barbara Vertebrate Museum (UCSB)

University of California Contact: (did not respond to survey)

Santa Barbara, CA 93106

2,500 specimens at last report (Yates et al., 1987); ACCREDITED BY ASM (1986)

The Yosemite Museum (YNP)

National Park Service Contact: David M Forgang P. O. Box 577 Voice: 209-372-0282

Yosemite, CA 95389 E-mail: david_forgang@nps.gov

800 specimens; local emphasis (Yosemite region); additional contact: Barbara Beroza (voice: 209-372-0297; e-mail: barbara_beroza@nps.gov)

COLORADO

Adams State College Collection (ASCC)

Department of Biology Adams State College Alamosa, CO 81101 72 specimens at last report (Yates et al., 1987)

Colorado National Monument (COLM)

National Park Service Contact: Laurie Lee
Fruita, CO 81521 Voice: 303-858-3617
FAX: 303-858-0372

105 specimens; local emphasis (Colorado National Monument); additional contact: Patrick Perrotti (voice: 303-858-

3617; FAX: 303-858-0372)

Colorado State University, Mammalogy Teaching Collection (CSUTC)

Department of Biology
Contact: Bruce A. Wunder
Colorado State University
Voice: 303-491-5949
Fort Collins, CO 80523
FAX: 303-491-0649

715 specimens; local emphasis E-mail: bwunder@lamar.colostate.edu

Denver Museum of Natural History (DMNH)

2001 Colorado Boulevard Contact: Cheri A. Jones
Denver, CO 80205-5798 Voice: 303-370-6354
FAX: 303-331-6492

FAX: 303-331-6492 E-mail: cajones@csn.net

8,800 specimens; collection includes nine holotypes; emphasis on mammals of Colorado, with many specimens collected before 1960; additional contact: William G. Alther (voice: 303-370-8321); ACCREDITED BY ASM (1989)

Dinosaur National Monument (DINO)

Box 101 Contact: (did not respond to survey)

Dinosaur, CO 81610

50 specimens at last report (Yates et al., 1987)

Fort Lewis College (FLC)

Department of Biology Fort Lewis College Durango, CO 81301-3999

240 specimens; local emphasis

Contact: Joseph C. Ortega

Great Sand Dunes National Monument (GSDNM)

11500 Highway 150 Contact: Sue Judis Mosca, CO 81146 Voice: 719-378-2312 FAX: 719-378-2594

30 specimens; local emphasis; additional contact: William E. Wellman

Rocky Mountain Biological Laboratory (RMBL)

Box 519 Contact: Susan Lohr Crested Butte, CO 81224 Voice: 303-349-7231 FAX: 303-349-7231

400 specimens; local emphasis E-mail: rmbl_dir@wsc.colorado.edu

Rocky Mountain National Park (ROMO)

Estes Park, CO 80517 Contact: James A. Mack

Voice: 303-586-1220 FAX: 303-586-1310

585 specimens; local emphasis; additional contact: Vernon C. Betts (voice: 303-586-1257); former collection

acronym: RMNP

University of Colorado Museum (UCM)

Zoological Collections (Mammals)

Campus Box 315

University of Colorado

Contact: Shi-Kuei Wu
Voice: 303-492-7359

FAX: 303-492-5105

Boulder, CO 80309 E-mail: skwu@spot.colorado.edu

18,373 specimens; collection includes one holotype; regional emphasis (Rocky Mountains); contains former private collections of E. R. Warren and D. A. Spencer; additional contact: Rosanne Humphrey (voice: 303-492-0276; e-mail: humphrey@spot.colorado.edu); ACCREDITED BY ASM (1975)

University of Northern Colorado (UNC-B*)

Vertebrate Collections-Biology

Department of Biological Sciences

University of Northern Colorado

Contact: James P. Fitzgerald
Voice: 303-351-2923

FAX: 303-351-1085

Greeley, CO 80639

 $1,\!560\ specimens;\ local\ emphasis,\ primarily\ rodents\ and\ bats;\ (*acronym\ modified\ by\ authors;\ former\ acronym:$

UNC-BIOLOGY)

CONNECTICUT

University of Connecticut (UCONN)

Mammal Research Collection

Department of Ecology and Evolutionary Biology

University of Connecticut

Contact: Robert E. Dubos

Voice: 203-486-4457

FAX: 203-486-6364

Storrs, CT 06269-3043 E-mail: dubos@uconnvm.uconn.edu 22,000 specimens; emphasis on mammals of New England and Paraguay; additional contact: Kurt Schwenk (voice: 203-486-0351); ACCREDITED BY ASM (1975 and 1983)

Yale University, Peabody Museum of Natural History (YPM)

Section of Mammals
Peabody Museum of Natural History
Yale University

Contact: Elisabeth S. Vrba
Voice: 203-432-5008
FAX: 203-432-9816

170 Whitney Avenue New Haven, CT 06511

9,500 specimens; contains Marsh osteological material, Morden African expedition, primate osteological specimens, and Baker Coahuila mammals; additional contact: Fred C. Sibley (voice: 203-432-5159; e-mail: fred.sibley@yale.edu)

DELAWARE

Delaware Museum of Natural History (DMNH)

P. O. Box 3937 Contact: Gene K. Hess Greenville, DE 19807 Voice: 302-658-9111 9,000 specimens; strong Philippine holdings FAX: 302-658-2610

University of Delaware (UDEL)

Department of Entomology and Applied Ecology
University of Delaware
Voice: 302-831-1300
Newark, DE 19717-1303
FAX: 302-831-3651

E-mail: roland.roth@mvs.udel.edu

400 specimens; collection emphasizes mid-Atlantic region of the United States

United States National Museum of Natural History (USNM)

Division of Mammals Contact: Richard W. Thorington, Jr.

Smithsonian Institution and Biological Resources

Division of the United States Geological Survey

Voice: 202-357-2150

FAX: 202-786-2979

10th and Constitution Avenue, N.W. E-mail: mnhvz049@sivm.si.edu

Washington, D. C. 20560

585,000 specimens; collection includes 3,336 holotypes; worldwide representation with many historically important series; marine-mammal collection; frozen-tissue collection (2,500 specimens); additional contacts: Alfred L. Gardner (voice: 202-357-2876; FAX: 202-357-1932); Linda K. Gordon (voice: 202-786-2495; e-mail: mnhvz034@sivm.si.edu); Charles W. Potter (voice: 202-786-2497; e-mail: mnhvz022@sivm.si.edu); Robert D. Fisher (voice: 202-357-1865; e-mail: mnhvz032@sivm.si.edu); ACCREDITED BY ASM (1975, 1977, and 1979)

FLORIDA

Everglades National Park (ENP)

40001 State Road 9336 Contact: (did not respond to survey)

Homestead, FL 33034-6733

50 specimens at last report (Yates et al., 1987)

Florida State University Museum (FSUM)

Department of Biological Science Contact: Frances C. James Florida State University Voice: 904-644-3700
Tallahassee, FL 32306 FAX: 904-644-9829
E-mail: james@bio.fsu.edu

670 specimens; local emphasis; former collection acronym: FSU

University of Florida, Florida Museum of Natural History (UF)

Department of Natural Sciences Contact: Charles A. Woods Florida Museum of Natural History Voice: 904-392-6561 University of Florida FAX: 904-392-8508

Gainesville, FL 32611 E-mail: cawoods@flmnh.ufl.edu 28,613 specimens; important regional collection, including cetaceans and Florida panthers; additional contact: Laurie Wilkins (voice: 904-392-6764; FAX: 904-846-0287; e-mail: lauriew@flmnh.ufl.edu); former collection acronym: FSM; ACCREDITED BY ASM (1975 and 1983)

GEORGIA

Savannah Science Museum (SSM)

4405 Paulsen Street Contact: (did not respond to survey)
Savannah, GA 31405

7 specimens at last report (Yates et al., 1987)

University of Georgia, Museum of Natural History (UGAMNH)

Museum of Natural History
University of Georgia
Voice: 706-542-1663
Athens, GA 30602-1882
FAX: 706-542-3920

E-mail: laerm@museum.ent.uga.edu

18,083 specimens; emphasis on mammals of the southeastern United States; includes former Georgia State University Collection; additional contact: Elizabeth McGhee (voice: 706-542-3940; e-mail: emcghee@museum.ent.uga.edu); ACCREDITED BY ASM (1985)

Bernice P. Bishop Museum (BPBM)

1525 Bernice Street Contact: Scott Miller P. O. Box 19000-A FAX: 808-847-8252;

Honolulu, HI 96817-0916 E-mail: scottm@bishop.bishop.hawaii.org 15,532 specimens; collection includes 11 holotypes; important series from Solomon Islands and Papua New Guinea;

additional contact: Carla Kishinami (voice: 808-848-4198; e-mail: carlak@bishop.bishop.

hawaii.org); ACCREDITED BY ASM (1975 and 1986)

IDAHO

Albertson College of Idaho, Orma J. Smith Museum of Natural History (CIMNH)

Albertson College of Idaho

2112 Cleveland Boulevard

Caldwell, ID 83605

Contact: Eric Yensen
Voice: 208-459-5335
FAX: 208-454-2077

E-mail: eyensen@stimpy.acofi.edu

1,110 specimens; good series of Spermophilus; frozen-tissue collection (50 specimens)

Idaho Fish and Game (IFGD)

Wildlife Health Laboratory
Contact: Julia Mulholland
Voice: 208-327-7070
Caldwell, ID 83605
FAX: 208-454-7667

733 specimens; local emphasis

University of Idaho, Bird and Mammal Museum (UIDA)

University of Idaho

Moscow, ID 83843

Contact: Donald R. Johnson

Voice: 208-885-6583

FAX: 208-885-7905

3,700 specimens; exclusively taxidermy mounts; features specimens from remote sites in Idaho

ILLINOIS

Burpee Museum of Natural History (BMNHC)

737 and 813 North Main Street Contact: Barbara C. Williams Rockford, IL 61103 Voice: 815-965-3132 681 specimens; local emphasis; additional contact: Michael Henderson (voice: 815-965-3132)

Chicago Academy of Sciences (CHAS)

2001 North Clark Street Contact: Ron Vasile Voice: 312-549-0606 FAX: 312-549-5199

5,056 specimens; collection includes two holotypes; includes former Northwestern University Collection; additional contact: Mary Hennen (voice: 312-549-0606, extension 2037; e-mail: hennen@fmnh785.fmnh.org); ACCREDITED BY ASM (1989)

Eastern Illinois University (EIU)

Zoology Department

Eastern Illinois University

Charleston, IL 61920

1,050 specimens; regional emphasis (Illinois)

Contact: Thomas A. Nelson

Voice: 217-581-2500

FAX: 217-581-2722

E-mail: cftan@eiu.edu

The Field Museum (FMNH)

Contacts: L. R. Heaney/B. D. Patterson

(formerly Field Museum of Natural History)

Division of Mammals

Voice: 312-922-9410

FAX: 312-663-5397

The Field Museum

Roosevelt Road at Lake Shore Drive

Chicago, IL 60605

E-mail: heaney@fmppr.fmnh.org

or patterso@fmppr.fmnh.org

156,400 specimens; collection includes 416 holotypes; significant holdings of primates and mammals of Chile, Peru, Philippines, East and Central Africa, Egypt, Iran, and Afghanistan; frozen-tissue collection (10,000 specimens); includes former B. J. Hayward Collection, Milwaukee Public Museum Collection of African mammals, and Princeton Biology Department Collection; additional contact: William T. Stanley (voice: extension 491; e-mail:

stanley@fmppr.fmnh.org); ACCREDITED BY ASM (1975 and 1983)

Illinois Natural History Survey (INHS)

4,000 specimens at last report (Yates et al., 1987)

607 East Peabody Drive Contact: Lawrence M. Page Champaign, IL 61820 Voice: 217-333-6846 FAX: 217-333-4949

960 specimens; regional emphasis (Illinois); additional contact: Kevin S. Cummings (voice: 217-333-1623; e-mail: cummings@ux1.cso.uiuc.edu)

Illinois State Museum (ISM)

Spring and Edwards Streets

Contact: (did not respond to survey)

Springfield, IL 62706

Illinois State University (ISU)

Department of Biological Sciences

Contact: Angelo Capparella
Illinois State University

Voice: 309-438-5124

Normal, IL 61790-4120

FAX: 309-438-3722

1,060 specimens; regional emphasis (Illinois)

E-mail: apcappar@ilstu.edu

Rockford College (RCMC)

Department of Biology
Rockford College
Rockford, IL 61101

Contact: (did not respond to survey)

Southern Illinois University (SIUCM)

200 specimens at last report (Yates et al., 1987)

Mammal Collection Contact: George A. Feldhamer
Department of Zoology, Mailcode 6501 Voice: 618-453-4115
Southern Illinois University FAX: 618-453-4110

Carbondale, IL 62901 E-mail: feldhamer@qm.c-zoo.siu.edu 6,980 specimens; emphasis on mammals of Illinois, western Kentucky, and western Tennessee; includes former collection of the Cooperative Wildlife Research Laboratory at Southern Illinois University (CWRL)

Southern Illinois University, Edwardsville (SIUE)

Department of Zoology Southern Illinois University Edwardsville, IL 62025 1,300 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

University of Illinois, Museum of Natural History (UIMNH)

University of Illinois Contact: Douglas Brewer Urbana, IL 61801 Voice: 217-333-2517

61,063 specimens; collection includes 20 holotypes; contains former W. W. Goodpaster and Edward Taylor Collections; additional contacts: Ann Hutflies or Steven D. Sroka (voice: 217-333-3906); ACCREDITED BY ASM (1975 and 1985)

United States Army, Construction Engineering Research Laboratories, Biological Inventory Collection (CERL/BIC)

Box 4005 Contact: William D. Severinghaus Champaign, IL 61820 Voice: 217-352-6511, extension 420

500 specimens at last report (Yates et al., 1987)

Western Illinois University, Museum of Natural History (WIU)

Department of Biological Sciences

Western Illinois University

Voice: 309-298-1546

Macomb, IL 61455

FAX: 309-298-2270

1,345 specimens; local emphasis E-mail: mfjat@uxa.ecn.bgu.edu

INDIANA

Ball State University, Mammal Collection (BSUMC)

Biology Department Contact: (did not respond to survey)
Ball State University
Muncie, IN 47306

300 specimens at last report (Yates et al., 1987)

Earlham College, Joseph Moore Museum (JMM)

Natural History Collection

Joseph Moore Museum

Earlham College

Richmond, IN 47374

Contact: John B. Iverson

Voice: 317-983-1405

FAX: 317-983-1497

E-mail: johni@earlham.edu

4,248 specimens; local emphasis; additional contact: William H. Buskirk

Indiana State University (ISUVC)

6,398 specimens; local emphasis

Department of Life Sciences

Indiana State University

Contact: John O. Whitaker, Jr.
Voice: 812-237-2383

Terre Haute, IN 47809

University of Southern Indiana (USI)

(formerly Indiana State University, Evansville, ISUE)

Contact: James H. Bandoli
Voice: 812-464-1792
University of Southern Indiana

Evansville, IN 47712

Contact: James H. Bandoli
Voice: 812-464-1960

E-mail: jhbandol.ucs@smtp.usi.edu

203 specimens; local emphasis

Buena Vista College (BVC)

Biology Department Contact: Richard P. Lampe

Buena Vista College Storm Lake, IA 50588

660 specimens at last report (Yates et al., 1987)

Central College (CUI)Contact: H. P. WhiddenBiology DepartmentVoice: 515-628-5147Central CollegeFAX: 515-628-5316

Pella, IA 50219 E-mail: whiddenh@central.edu

550 specimens; collection emphasizes mammals of Iowa; Yucatan bats; several hundred specimens transferred to University of Iowa, Museum of Natural History (IOWA)

Luther College, Sherman A. Hoslett Museum of Natural History (SHMC)

Department of Biology

Luther College

Voice: 319-387-1553

Decorah, IA 52101-1045

Contact: Tex A. Sordahl

Voice: 319-387-1080

E-mail: sordahlt@luther.edu

1,595 specimens; mammals of northeastern Iowa and the upper-midwestern United States

Putnam Museum of History and Natural Science (PM)

1717 West 12th Street Contact: Janice A. Hall
Davenport, IA 52804 Voice: 319-324-1934
FAX: 319-324-6638

575 specimens; local emphasis; additional contact: Scott Roller

Sanford Museum Collections (SM)

117 East Willow Contact: (did not respond to survey)

Cherokee, IA 51012

Size of collection not reported in Yates et al. (1987)

State Historical Society of Iowa (ISNHC)

(formerly Iowa State Natural History Collection)

East 6th and Locust

Des Moines, IA 50319

Contact: William M. Johnson
Voice: 515-281-5627

FAX: 515-282-0502

85 specimens; local emphasis

University of Iowa, Museum of Natural History (IOWA)

University of Iowa Contact: George D. Schrimper Iowa City, IA 52242 Voice: 319-335-0481

2,455 specimens; regional emphasis (Iowa); includes W. T. Hornaday Australian marsupials plus several hundred specimens transferred from Central College, Pella, IA (CUI); additional contact: Holmes Semken, Geology

Department, University of Iowa (voice: 319-335-1830)

University of Northern Iowa, Nixon Wilson Collection (NWC)

Department of Biology Contact: (did not respond to survey)

University of Northern Iowa Cedar Falls, IA 50614

340 specimens at last report (Yates et al., 1987)

University of Northern Iowa (UNI)

Department of Biology University of Northern Iowa Cedar Falls, IA 50614 40 specimens at last report (Yates et al., 1987) Contact: (did not respond to survey)

KANSAS

Emporia State University, Schmidt Museum of Natural History (SMNH)

Emporia State University

Emporia, KS 66801

Contact: Dwight Moore
Voice: 316-341-5611

FAX: 316-341-6055

900 specimens; local emphasis E-mail: mooredwi@esumail.emporia.edu

Fort Hays State University, Sternberg Museum of Natural History (MHP)

Collection of Mammals

Fort Hays State University

Voice: 785-628-5664

Hays, KS 67601

FAX: 785-628-4046

E-mail: bijc@fhsuvm.fhsu.edu

35,000 specimens; collection includes one holotype; large series of Great Plains mammals; combined collections of the Sternberg Museum, former Museum of the High Plains, and part of the C. A. Ely Collection; ACCREDITED BY ASM (1975 and 1980)

Friends University, Fellow-Reeve Museum of History and Science (FRM)

Friends University
2100 University
Voice: 316-292-5594
Wichita, KS 67213

Contact: Philip Nagley
Voice: 316-292-5594
FAX: 316-263-1092

31 specimens; taxidermy mounts; material collected by Quaker missionaries (United States, Canada, and Africa)

Pratt Education Center and Aquarium (PECA)

(formerly Kansas Forestry, Fish and GameContact: Roland SteinCommission, KFFGC)Voice: 316-672-5911Kansas Department of Wildlife and ParksFAX: 316-672-6020

512 S.E. 25th Avenue Pratt, KS 67124-8174

konza.konza.ksu.edu

128 specimens; primarily taxidermy mounts; additional contact: Steve Stockhouse

Kansas State University (KSU)

Teaching Collection

Division of Biology

Kansas State University

Manhattan, KS 66506-4901

Contact: Donald W. Kaufman

Voice: 785-532-6622

FAX: 785-532-6653

E-mail: dwkaufma@lter-

500 specimens; primarily material from the United States; collection used for teaching

Pittsburg State University (PSUMC)

Biology Department
Pittsburg State University
Pittsburg, KS 66762
1,200 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Southwestern College, Natural History Museum (SCNHM)

Southwestern College Contact: Max Thompson 100 College Street Voice: 316-221-8273 Winfield, KS 67156-2499 FAX: 316-221-8382

E-mail: maxt@jinx.sckans.edu 2,100 specimens; emphasis on southcentral Kansas; small collections from Australia, Africa, Mexico

University of Kansas, Museum of Natural History (KU)

Division of Mammals Contact: Robert M. Timm University of Kansas Voice: 785-864-4180 Lawrence, KS 66045-2454 FAX: 785-864-5335

156,000 specimens; collection includes 129 holotypes; important series from the Great Plains, western United States, Mexico, and Central America; frozen-tissue collection (500 specimens); contains former collections of the Kansas City Museum, the Ralph Ellis Collection, the Albert Schwartz Collection, and the University of Miami, Coral Gables

E-mail: btimm@falcon.cc.ukans.edu

Contact: (did not respond to survey)

Collection; additional contact: Thor Holmes (voice: 913-864-3047); ACCREDITED BY ASM (1975 and 1987)

Wichita State University (WSBC)

Department of Biological Sciences Contact: D. A. Distler Wichita State University Voice: 316-689-3113 Wichita, KS 67208-1595 200 specimens

KENTUCKY

Eastern Kentucky University (EKU)

Biology Department Contact: Charles L. Elliott Eastern Kentucky University Voice: 606-622-1531 Richmond, KY 40475 FAX: 606-622-1020 925 specimens at last report (Yates et al., 1987)

Murray State University (MSUMC)

Department of Biological Sciences Contact: Robert A. Martin Murray State University Voice: 502-762-6754 Murray, KY 42071 FAX: 502-764-4887

E-mail: a46713f@msumusic.bitnet

700 specimens; local emphasis, with synoptic series from eastern United States

University of Kentucky (UKEN)

Vertebrate Natural History Collection Thomas Hunt Morgan School of Biological Sciences University of Kentucky Lexington, KY 40506 5,346 specimens at last report (Yates et al., 1987)

Western Kentucky State University (WKSU)

Bowling Green, KY 42101 Contact: (did not respond to survey) 100 specimens at last report (Yates et al., 1987)

Centenary College Vertebrate Collection (CCVC)

(formerly Centenary College Collection, CCC) Contact: A. Bradley McPherson

Biology Department Voice: 318-869-5209 Centenary College FAX: 318-869-5211

Shreveport, LA 71104 E-mail: bmcphers@beta.centenary.edu

1,450 specimens; about one-half of the collection is Latin American material

Louisiana State University, Museum of Natural Science (LSUMZ)

119 Foster Hall Contact: Mark S. Hafner Louisiana State University Voice: 504-388-3083 Baton Rouge, LA 70803-3216 FAX: 504-388-3075

E-mail: namark@unix1.sncc.lsu.edu

37,945 specimens; collection includes 23 holotypes; collection emphasizes mammals from southcentral United States, Mexico, Central America, and South America; frozen-tissue collection (5,300 specimens); contains former collection of the University of Southwestern Louisiana (USLBM); additional contact: Steven Cardiff; ACCREDITED BY ASM (1975 and 1989)

Louisiana Tech University (LTU)

Zoology Vertebrate Research Collection Department of Zoology

Louisiana Tech University

Ruston, LA 71272

2,588 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Northeast Louisiana University, Museum of Zoology (NLU)

Department of Biology

Northeast Louisiana University

Contact: Neil H. Douglas

Voice: 318-342-1799

Monroe, LA 71209

1,100 specimens; local emphasis; former collection acronym: NELU

Northwestern State University of Louisiana (NSUL)

Department of Biology Contact: (did not respond to survey)

Northwestern State University of Louisiana

Natchitoches, LA 71201

1,740 specimens at last report (Yates et al., 1987)

1

Southeastern Lousiana University, Vertebrate Museum (SLU)

Department of Biological Sciences

Southeastern Louisiana University

Hammond, LA 70402-0814

534 specimens; local emphasis

Contact: Philip C. Stouffer
Voice: 504-549-2191

FAX: 504-549-3851

E-mail: fbi02251@selu.edu

Tulane University, Museum of Natural History (TU)

F. Edward Hebert Research Center

Tulane University

Belle Chasse, LA 70037

Contact: Henry L. Bart, Jr. Voice: 504-394-1711

FAX: 504-394-5045

E-mail: piscine@mailhost.tcs.tulane.edu

7,807 specimens; additional contacts: Michael S. Taylor, (same address as above); Craig S. Hood (Department of Biological Sciences, Loyola University, New Orleans, LA 70118; voice: 504-865-2288; e-mail: chood@beta.loyno.edu)

University of Maine, Farmington (UMF)

Department of Biology Contact: (did not respond to survey)

University of Maine Farmington, ME 04938

2,000 specimens at last report (Yates et al., 1987)

University of Maine (UMO) Contact: Thomas P. Hodgman

Department of Wildlife Ecology Voice: 207-581-2876 FAX: 207-581-2858 University of Maine

Orono, ME 04469 E-mail: hodgman@apollo.umnfa.

maine.edu

1,532 specimens; local emphasis; good series of coyote, fisher, and marten skulls

MARYLAND

Frostburg State University, Mammal Collection (FSUMC)

(formerly Appalachian Environmental Laboratory, AEL) Contact: Ronald E. Barry Voice: 301-689-4167 Department of Biology Frostburg State University FAX: 301-689-4737

Frostburg, MD 21532-1099 E-mail: rbarry@fre.fsu.umd.edu

2,164 specimens; regional emphasis

Patuxent Wildlife Research Center (PWRC)

Contact: M. C. Perry Laurel, MD 20708 Voice: 301-497-5622 300 specimens; local emphasis, plus synoptic collection FAX: 301-497-5624

MASSACHUSETTS

Amherst College, Pratt Museum of Natural History (PMNH)

Neontology Collection Contact: Linda L. Thomas Amherst College Voice: 413-542-2165 Amherst, MA 01002 FAX: 413-542-2713

500 specimens; additional contact: Margery C. Coombs (voice: 413-542-2710; e-mail: mcc@ bio.umass.edu)

Boston University (BUTC)

Biology Department Teaching Collection Contact: (did not respond to survey)

Boston University

2 Cummington Street, Boston, MA 02215

300 specimens at last report (Yates et al., 1987)

Harvard University, Museum of Comparative Zoology (MCZ)

Mammal Department Contact: A. W. Crompton Voice: 617-495-3202 Harvard University Cambridge, MA 02138 FAX: 617-495-5667

E-mail: a_crompton@harvard.edu

E-mail: llthomas@amherst.edu

72,000 specimens; collection includes 322 holotypes; important collection of primates, including material from southeastern Asia, Africa, and South America; historically important North American series; contains former collections of O. Bangs, R. S. Palmer, M. Copeland, Kirk, and Grandidier; additional contact: Maria E. Rutzmoser (voice: 617-495-2469; e-mail: m_e_rutz@mcz.harvard.edu); **ACCREDITED BY ASM** (1975)

Massachusetts Division of Fisheries and Wildlife (MDFW)

Field Headquarters Contact: James E. Cardoza 1 Rabbit Hill Road Voice: 508-792-7270 Westborough, MA 01581 FAX: 508-792-7275

115 specimens; regional emphasis (Massachusetts)

Northeastern University Vertebrate Collection (NUVC)

Center for Vertebrate Studies

Department of Biology

Northeastern University

Contact: Gwilym S. Jones

Voice: 617-373-4027

FAX: 617-373-3724

Boston, MA 02115 E-mail: g.jones@nunet.neu.edu

29,433 specimens; New England emphasis; large series of Globicephala melaena, Canis latrans, and Martes pennanti

Peabody Essex Museum (PMS)

Natural History Department Contact: Jane M. Winchell

East India Square Voice: 508-745-1876, extension 3127

Salem, MA 01970 FAX: 508-744-6776 295 specimens; local emphasis (Essex Co., Massachusetts); additional contact: Christine Jones

Springfield Science Museum (SSM)

236 State Street Contact: David J. Stier Springfield, MA 01103 Voice: 413-733-1194 FAX: 413-739-8785

University of Massachusetts, Museum of Zoology (UMA)

Department of Biology

University of Massachusetts

Amherst, MA 01003-0027

Contact: Curator of collection

Voice: 413-545-3565

FAX: 413-545-1696

4,465 specimens; good series of rodents and bats

Westfield State College, Museum and Herbarium (WSC)

The Museum and Herbarium

Westfield State College

Westfield, MA 01086

Contact: David A. Lovejoy

Voice: 413-572-5307

FAX: 413-562-3613

E-mail: d_lovejoy@owl.wsc.mass.edu

1,601 specimens; local emphasis, especially Peromyscus; contains former David A. Lovejoy Collection (DALC)

MICHIGAN

Central Michigan University, Center for Cultural and Natural History (CCNH)

Central Michigan University

Mt. Pleasant, MI 48859

Contact: Lynn Fauver
Voice: 517-774-3829
FAX: 517-774-3542

2,711 specimens; local emphasis E-mail: l.fauver@cmuvm.csv.cmich.edu

Cranbrook Institute of Science (CIS)

Box 801 Contact: Carole S. DeFord 1221 North Woodward Avenue Voice: 810-645-3214 Bloomfield Hills, MI 48303-0801 FAX: 810-645-3050

304 specimens; collection used for exhibition E-mail: aa634@detroit.freenet.org

Eastern Michigan University, T. L. Hankinson Vertebrate Museum (EMU)

Department of Biology Contact: Allen Kurta

Eastern Michigan University

Ypsilanti, MI 48197 600 specimens; local emphasis E-mail: bio kurta@emuvax.emich.edu

Hope College (HCMZ)

Department of Biology Hope College

Holland, MI 49422-9000 328 specimens; local emphasis Contact: Kathy Winnett-Murray

Voice: 616-395-7719

E-mail: winnetmurray@hope.cit.

hope.edu

Lake Superior State College (LSSC)

Biology Department Lake Superior State College Sault Sainte Marie, MI 49783 300 specimens at last report (Yates et al., 1987) Contact: (did not respond to survey)

Michigan State University Museum (MSU)

Mammalogy Division Michigan State University East Lansing, MI 48824-1045 Contact: A. Christopher Carmichael Voice: 517-353-6624

FAX: 517-432-2846

E-mail: ccarmchl@museum.cl.msu.edu 37,132 specimens; emphasis on mammals of Great Lakes region, Mexico (particularly Zacatecas, Oaxaca, and Durango), and South America; good series of Saguinus; additional contact: Laura Abraczinskas (voice: 517-355-

1290; e-mail: laura@museum.cl.msu.edu); ACCREDITED BY ASM (1975 and 1985)

Public Museum of Grand Rapids (GRPM)

(formerly Grand Rapids Public Museum) Contact: Bryan Kwapil 54 Jefferson SE Voice: 616-456-3891 Grand Rapids, MI 49503 FAX: 616-456-3926

310 specimens; regional emphasis; additional contact: Marilyn Merdzinski

University of Michigan, Museum of Zoology (UMMZ)

University of Michigan Contact: Philip Myers Voice: 313-764-0456 Ann Arbor, MI 48109 FAX: 313-763-4080

E-mail: pmyers@umich.edu

138,517 specimens; collection includes 122 holotypes; good holdings of Mexican species, Philippine bats, and mammals of Paraguay, Costa Rica, and Panama; contains Lee R. Dice Collection of Peromyscus, former Frederick H. Test Collection (FHTC), and University of Michigan Department of Zoology Collection (UMDZ); frozen-tissue collection (1,000 specimens); additional contact: Priscilla Tucker; ACCREDITED BY ASM (1975 and 1987)

Wayne State University, Museum of Natural History (WSUMNH)

Department of Biological Sciences Wayne State University Detroit, MI 48202 1,352 specimens (reported in Yates et al., 1987)

Contact: Jeheskel (Hezy) Shoshani Voice: 313-577-2873

FAX: 313-577-6891

MINNESOTA

Bemidji State University, Vertebrate Collections (BSCVC)

Department of Biology

Bemidji State University

Bemidji, MN 56601

Contact: Elizabeth Rave
Voice: 218-755-2785
FAX: 218-755-4107

2,536 specimens; local emphasis

Saint John's University, Biology Collections (SJUBC)

Department of Biology
Saint John's University
Contact: Norman L. Ford
Voice: 612-363-3172

Collegeville, MN 56321-3000 500 specimens; local emphasis

The Science Museum of Minnesota (SMM)

Biological Collections Contact: Frederick J. Jannett, Jr.

30 East 10th Street Voice: 612-221-9429 St. Paul, MN 55101 FAX: 612-221-4777

45,513 specimens; regional emphasis (Minnesota); contains the F. J. Jannett Collection; additional contacts: Lori Leirdahl (voice: 612-221-9435), Gretchen Anderson (voice: 612-221-4764); collection is not catalogued

University of Minnesota, Duluth (UMD)

Department of Biology Contact: Donald Christian

University of Minnesota Duluth, MN 55812

1,150 specimens; local emphasis (northern Minnesota)

University of Minnesota, James Ford Bell Museum of Natural History (MMNH)

Mammal Collection Contact: Elmer C. Birney
100 Ecology Building Voice: 612-624-6293
1987 Upper Buford Circle FAX: 612-624-6777

University of Minnesota E-mail: ecbirney@ecology.umn.edu

St. Paul, MN 55108

17,302 specimens; collection emphasizes mammals of Minnesota, Philippine historical materials, Mexican bats and rodents, Patagonian rodents and marsupials; frozen-tissue collection (50 specimens); contains former University of Minnesota Wildlife Collection (UMDFW); ACCREDITED BY ASM (1975)

MISSISSIPPI

Mississippi Museum of Natural Science (MMNS)

111 North Jefferson Contact: (did not respond to survey)

Jackson, MS 39202

6,850 specimens at last report (Yates et al., 1987)

Mississippi State University, Zoological Collections (MSUZ)

Department of Biological Sciences

Box GY

Voice: 601-325-7568

Mississippi State, MS 39762

Contact: Jerome A. Jackson
Voice: 601-325-7598

FAX: 601-325-7939

750 specimens; local emphasis; former collection acronym: MISSU

MISSOURI

Central Missouri State University (CMSU)

Biology Department Contact: Laura J. McLellan

Central Missouri State University Warrensburg, MO 64093

2,181 specimens; local emphasis

Voice: 816-543-8785 FAX: 816-543-8006

E-mail: mclellan@cmsuvmb.cmsu.edu

Gaylord Memorial Laboratory Museum (GML)

Route 1, Box 185 Puxico, MO 63960

100 specimens; local emphasis

Contact: Leigh Fredrickson

Northwest Missouri State University (NWMSU)

Department of Biology Northwest Missouri State University Maryville, MO 64468-6001 2,000 specimens

Contact: David A. Easterla

Truman State University (NEMSU)

(formerly Northeast Missouri State University) Division of Science Truman State University Kirksville, MO 63501

2,900 specimens; regional emphasis (Missouri)

Contact: L. Scott Ellis Voice: 816-785-4621 FAX: 816-785-4045 E-mail: sellis@truman.edu

University of Missouri, Museum of Zoology (MUMZ)

112 Stephens Hall University of Missouri, Columbia Columbia, MO 65211

3,791 specimens; regional emphasis (Missouri)

Contact: Mary J. Ratnaswamy Voice: 573-882-9424 FAX: 573-884-5070 E-mail: mary_ratnaswamy@ muccmail.missouri.edu

MONTANA

Glacier National Park, Glacier Collection (GLAC)

West Glacier, MT 59936 Contact: (did not respond to survey)

250 specimens at last report (Yates et al., 1987)

Montana State University (MSUB)

Montana Department of Fish, Wildlife and Parks Contact: Keith E. Aune Wildlife Laboratory Voice: 406-994-6357 Montana State University FAX: 406-994-4090 Bozeman, MT 59717

7,100 specimens; regional emphasis; good series of Montana brown bears; frozen-tissue collection (400 specimens); additional contact: Phillip Schladwieler

University of Montana, Zoological Museum (UMZM)

(formerly University of Montana Bird and Mammal Contact: David L. Dyer Museum, UMZ) Voice: 406-243-4743

FAX: 406-243-4184

Division of Biological Sciences University of Montana Missoula, MT 59801

12,350 specimens; contains John and Frank Craighead Grizzly Bear Collection; Chinese and Russian mammals; good collection of carnivore and skeletal material; ACCREDITED BY ASM (1975 and 1985)

NEBRASKA

Chadron State College, Collection of Vertebrates (CSCCV)

Chadron State College
Contact: Jay Dee Druecker
Voice: 308-432-6278
Chadron, NE 69337
FAX: 308-432-6434

E-mail: jdruecker@cscl.csc.edu 3,500 specimens; local emphasis; planning underway to transfer most specimens to the University of Nebraska, Lincoln (UNSM) in the near future; former collection acronym: CSC

Hastings College, Collection of Vertebrates (HCCV)

Department of Biology

Hastings College

Voice: 402-461-7382

Hastings, NE 68901

FAX: 402-463-3002

E-mail: dwilhelm@hastings.edu

550 specimens; collection contains a few specimens transferred from Hastings Museum (HM)

Hastings Museum (HM)

1330 North BurlingtonContact: Burton NelsonHastings, NE 68901Voice: 402-461-2399264 specimens; exclusively taxidermy mountsFAX: 402-461-2379

Kearney State University, Vertebrate Museum (VMKSC)

Biology Department Contact: (did not respond to survey)
Kearney State University
Kearney, NE 68849-0531

University of Nebraska State Museum (UNSM)

3,647 specimens at last report (Yates et al., 1987)

Division of Zoology

University of Nebraska, Lincoln

Lincoln, NE 68588-0514

Contact: Patricia W. Freeman

Voice: 402-472-6606

FAX: 402-472-8949

E-mail: pfreeman@unlinfo.unl.edu

11,400 specimens; large series of regional species; specimens of historical importance; contains the Edson Fichter Collection and part of the University of Nebraska, Omaha Collection; additional contact: Thomas E. Labedz (voice: 402-472-8366; e-mail: tlabedz@unlinfo.unl.edu); ACCREDITED BY ASM (1975)

University of Nebraska at Omaha (UNO)

Department of Biology University of Nebraska at Omaha Omaha, NE 68182-0040 610 specimens; local emphasis Contact: Kenneth N. Geluso Voice: 402-554-2840

E-mail: kngeluso@cwis.unomaha.edu

NEVADA

Lake Mead National Recreation Area (LAME)

601 Nevada Highway

Boulder City, NV 89005

Contact: Leslie Peterson

Voice: 702-293-8959

FAX: 702-293-8936

145 specimens; local emphasis (record of species in area prior to inundation of Lake Mead)

Nevada State Museum (NSMC)

Capitol Complex Contact: Ann Pinzl
Carson City, NV 89710 Voice: 702-687-4810
FAX: 702-687-4168

1,426 specimens; regional emphasis (Nevada); former collection acronym: NSM

Nevada State Museum and Historical Society (NSMHS)

700 Twin Lakes Drive Contact: George T. Austin Las Vegas, NV 89107 Voice: 702-486-5205 FAX: 702-486-5172

7,600 specimens; regional emphasis; contains former collections of the University of Nevada, Las Vegas (UNLV) and the J. R. Alcorn Collection (JRAC)

University of Nevada, Museum of Biology (UNEVR)

Department of Biology/314

University of Nevada

Reno, NV 89557

FAX: 702-784-1302

1,770 specimens; local emphasis E-mail: jenkins@scs.unr.edu

NEW HAMPSHIRE

University of New Hampshire (UNH)

Department of Zoology
University of New Hampshire
Durham, NH 03824

Contact: Michelle Scott
Voice: 603-862-2100

750 specimens; regional emphasis (New Hampshire)

NEW JERSEY

Trailside Nature and Science Center (TNSC)

Division of Parks and Recreation

452 New Providence Road

Contact: Hollace Hoffman
Voice: 908-789-3670

Mountainside, NJ 07092

136 specimens; exclusively taxidermy mounts

NEW MEXICO

Carlsbad Caverns National Park (CACA)

National Park Service

3225 National Parks Highway

Carlsbad, NM 88220

FAX: 505-785-2133

600 speciments: local amphasis: additional contact: Celia Comes: former collection generators of the contact o

600 specimens; local emphasis; additional contact: Celia Gomez; former collection acronym: CCNP

Eastern New Mexico University, Natural History Museum (ENMUNHM)

Eastern New Mexico University Contact: A. L. Gennaro

Portales, NM 88130 Voice: 505-562-2723 FAX: 505-562-2192

E-mail: gennaroa@email.enmu.edu

10,300 specimens; emphasis on eastern New Mexico, south of the Canadian River

New Mexico Environment Department (NMED)

(formerly New Mexico Environmental Improvement Agency, NMEIA)

Vector Control Program
Contact: Ted L. Brown
1190 St. Francis Drive
Voice: 505-474-4410
P. O. Box 26110
FAX: 505-473-3477

Santa Fe, NM 87505

160 specimens; primarily rodents involved in plague zoonotic cycle in New Mexico; additional contact: Pamela J. Reynolds, 1191 5th Street, Suite 204, Santa Fe, NM 87505

New Mexico Museum of Natural History (NMMNH)

1801 Mountain Road NW
Albuquerque, NM 87104
Contact: David J. Hafner
Voice: 505-841-2825

FAX: 505-841-2866 E-mail: hafner@darwin.nmmnh-abq.

mus.nm.us

2,500 specimens; frozen-tissue collection (2,000 specimens); excellent series of Nearctic Ochotonidae; additional contact: Jacquelyn G. McConachie (e-mail: jackie@darwin.nmmnh-abq.mus.nm.us); home page:

http://www.aps.edu/htmlpages/nmmnh.html; ACCREDITED BY ASM (1994)

New Mexico State University (NMSU)

Department of Biology Contact: Peter Houde New Mexico State University
Las Cruces, NM 88003
12,045 specimens at last report (Yates et al., 1987); ACCREDITED BY ASM (1977)

Philmont Scout Ranch, Seton Memorial Library (SETON)

Cimarron, NM 87714 Contact: Stephen Zimmer

Voice: 505-376-2281

900 specimens; specimens collected by naturalist Ernest Thompson Seton between 1880-1930

University of New Mexico, Museum of Southwestern Biology (MSB)

Department of Biology
University of New Mexico
Albuquerque, NM 87131
Contact: Terry L. Yates
Voice: 505-277-3838
FAX: 505-277-0304

E-mail: tyates@sevilleta.unm.edu

Contact: Randy D. Jennings

116,000 specimens; collection includes five holotypes, 73 symbiotypes, and one species color standard; collection emphasizes mammals of the southwestern United States, Mexico, Bolivia, Japan, and Central Africa; frozen-tissue collection (85,000 specimens); contains the Biological Surveys Collection, Fort Collins (BS/FC); additional contacts: Michael A. Bogan (voice: 505-766-3903; e-mail: mbogan@

unm.edu), William L. Gannon (voice: 505-277-5340; e-mail: wgannon@unm.edu), Cindy A. Ramotnik (voice: 505-766-2811; e-mail: ramotnik@unm.edu); ACCREDITED BY ASM (1975, 1984, and 1987)

Western New Mexico University (WNMU)

Biology Collection Western New Mexico University

Silver City, NM 88062	
4,000 specimens at last report (Yates et al., 1987)	

White Sands National Monument (WSNM)

P. O. Box 458 Contact: (did not respond to survey)

Alamogordo, NM 88310

50 specimens at last report (Yates et al., 1987)

NEW YORK

American Museum of Natural History (AMNH)

Central Park West at 79th Street

New York, NY 10024-5192

Contact: Ross D. E. MacPhee

Voice: 212-769-5480

FAX: 212-769-5495

E-mail: macphee@amnh.org

Contact: Paul C. Huth

Voice: 914-255-5969

Contact: David W. Steadman

Voice: 518-474-5800

277,480 specimens; collection includes 1,062 holotypes; contains many historically important series, plus many specimens collected in the late 19th and early 20th centuries; contains the Bluntchli Embryological Collection; additional contact: Bryn J. Mader (voice: 212-769-5475; e-mail: mader@ amnh.org); ACCREDITED BY ASM (1975 and 1978)

Brooklyn Children's Museum (BCM)

145 Brooklyn Avenue Contact: Nancy Paine
Brooklyn, NY 11213 Voice: 718-472-5188
FAX: 718-472-5189

80 specimens; exclusively taxidermy mounts; additional contact: Beth Alberty (voice: 718-472-4289)

Buffalo Society of Natural Sciences (BSNS)

Buffalo Museum of Science Contact: Arthur R. Clark 1020 Humboldt Parkway Voice: 716-896-5200 Buffalo, NY 14211-1293 FAX: 716-897-6723

2,158 specimens; primarily local species; contains the former J. J. Reedy Collection (Niagara University)

Cornell University, Vertebrate Collections (CUVC)

Section of Ecology and Systematics

Cornell University

Corson Hall

Corson Hall

Ithaca, NY 14853-2701

E-mail: kjmz@cornell.edu

17,500 specimens; frozen-tissue collection (200 specimens); additional contact: Charles M. Dardia (e-mail:

cmd7@cornell.edu); former collection acronym: CU; ACCREDITED BY ASM (1975)

Mohonk Preserve, Inc. (MP)

(formerly Mohonk Museum, MM)
Daniel Smiley Research Center
1000 Mountain Rest Road
New Platz, NY 12561
200 specimens; local emphasis

specimens, tocal emphasis

New York State Museum (NYSM)

Mammal Collection, Biological Survey 3140 Cultural Education Center Albany, NY 12230

FAX: 518-473-8496

11,200 specimens; regional emphasis (New York); large series of complete skeletons of small mammals; contains collection formerly at St. Bonaventure University (STBU); additional contact: Joseph Bopp (voice: 518-486-2025); ACCREDITED BY ASM (1975)

State University of New York at Oneonta (SUNYO)

Biology Department Contact: Robert Phillips
State University of New York-Oneonta Voice: 607-436-3344
Oneonta, NY 13820 FAX: 607-436-3646

E-mail: phill:rr@snyoneva.cc. 300 specimens; regional emphasis oneonta.edu

State University of New York, Roosevelt Wildlife Collection (RWC)

College of Environmental Science and Forestry

State University of New York

1 Forestry Drive

Contact: Ronald J. Giegerich
Voice: 315-470-6763

FAX: 315-470-6934

Syracuse, NY 13210

2,900 specimens; local emphasis; additional contact: Larry W. VanDruff (voice: 315-470-6803)

The University at Albany (SUCEA)

Department of Biological Sciences

State University of New York

Albany, NY 12222

Contact: Margaret M. Stewart
Voice: 518-442-4348

FAX: 518-442-4767

300 specimens; regional emphasis (upstate New York)

NORTH CAROLINA

North Carolina State Museum of Natural Sciences (NCSM)

Mammal Collection Contact: Mary Kay Clark 102 North Salisbury Street Voice: 919-733-7450 Raleigh, NC 27603 FAX: 919-733-1573

8,300 specimens; regional emphasis (North Carolina and southeastern United States); major repository for manatees; specimens from late 1800s; good collection of marine mammals; additional contact: Jeff Beane

North Carolina State University (NCS)

Department of Zoology

North Carolina State University

Raleigh, NC 27695-7617

4,150 specimens; regional emphasis

Contact: Roger A. Powell
Voice: 919-515-4561

FAX: 919-515-5327

E-mail: newf@ncsu.edu

University of North Carolina at Wilmington (UNCW)

Vertebrate Collections

Department of Biological Sciences

University of North Carolina at Wilmington

Contact: W. David Webster
Voice: 910-395-3756

FAX: 910-350-4066

Wilmington, NC 28403-3297 E-mail: webste@vxc.ocis.uncwil.edu

4,200 specimens; regional emphasis (North Carolina); frozen-tissue collection (25 specimens; Sorex)

Wake Forest University, Vertebrate Collection (WFUVC)

Department of Biology

Wake Forest University

Winston-Salem, NC 27109

Contact: (did not respond to survey)

400 specimens at last report (Yates et al., 1987)

NORTH DAKOTA

North Dakota Heritage Center (SHSND)

State Historical Society of North Dakota
Contact: C. L. Dill
612 East Boulevard Avenue
Voice: 701-328-2666
Bismarck, ND 58505-0830
FAX: 701-328-3710
196 specimens; primarily taxidermy mounts for exhibit; additional contact: Mark J. Halvorson

North Dakota State University (NDSU)

Department of Zoology

North Dakota State University

Fargo, ND 58105-5517

2,900 specimens; local emphasis

Contact: William J. Bleier

Voice: 701-231-8421

FAX: 701-231-7149

E-mail: bleier@ndsuvml

Northern Prairie Science Center (NPSC)

(formerly Northern Prairie Wildlife ResearchContact: Ron KirbyCenter, NPWRC)Voice: 701-252-5363National Biological SurveyFAX: 701-252-42178711 37 Street, SEE-mail: kirbyr@mail.fws.gov

Jamestown, ND 58401 50 specimens; regional emphasis (northern Great Plains)

University of North Dakota, Vertebrate Museum (UND)

Department of Biology
University of North Dakota
Contact: Robert W. Seabloom
Voice: 701-777-4676
Grand Forks, ND 58202
FAX: 701-777-2623

2,500 specimens at last report (Yates et al., 1987) E-mail: rseabloo@badlands.nodak.edu

OHIO

Cincinnati Museum of Natural History (CMNH)

Frederick and Amey Geier Collections and Research Center
Contact: Robert S. Kennedy
Voice: 513-345-8510
FAX: 513-345-8501

3,300 specimens; mammals of the Ohio Valley; Philippine mammals; frozen-tissue collection (800 specimens); contains collection formerly at the University of Cincinnati (UCIN)

Cleveland Museum of Natural History (CMNH)

1 Wade Oval Drive Contact: Timothy O. Matson University Circle Voice: 216-231-4600 FAX: 216-231-5919

15,100 specimens; ACCREDITED BY ASM (1994)

Dayton Museum of Natural History (DMNH 1)

Biology Collections

Contact: Gary A. Coovert

Voice: 513-275-7431, extension 14

Dayton, OH 45414

FAX: 513-275-5811

2,008 specimens; local emphasis Miami University (MU)

Hefner Zoology Museum

Department of Zoology

Voice: 513-529-4617

Miami University

Contact: Paul M. Daniel

Voice: 513-529-4617

FAX: 513-529-6900

Oxford, OH 45056 E-mail: daniel@msmail.muohio.edu

677 specimens; local emphasis

Ohio Historical Society, Natural History Synoptic Collection (HCNHSC)

1982 Velma Avenue Contact: Carl Albrecht Columbus, OH 43211-2497 Voice: 614-297-2609 FAX: 614-297-2411

700 specimens; additional contact: Robert Glotzhober (voice: 614-297-2633)

Ohio State University, Museum of Biological Diversity (OSUMZ)

1315 Kinnear Road Contact: John M. Condit Ohio State University Voice: 614-292-0543 Columbus, OH 43212-1192 FAX: 614-292-7774 E-mail: jcondit@magnus.acs.

4,050 specimens; regional emphasis ohio-state.edu

Ohio University, Vertebrate Collection (OUVC)

Department of Biological Sciences Contact: Scott M. Moody Ohio University (Irvine 042) Voice: 614-593-2360 Athens, OH 45701-2979 FAX: 614-593-0300

E-mail: moody@ouvaxa.cats.ohiou.edu

1,220 specimens; regional emphasis (southeastern Ohio); frozen-tissue collection (500 specimens)

OKLAHOMA

Cameron University, Museum of Zoology (CUMZ)

Biology Department Contact: Jack D. Tyler **Cameron University** Voice: 405-581-2349 Lawton, OK 73505 FAX: 405-581-2421 1,200 specimens; regional emphasis (southeastern Oklahoma and Black Mesa area of Oklahoma)

East Central University (ECENT) Contact: Larry L. Choate

Voice: 405-332-8000, extension 499 Department of Biology

East Central University FAX: 405-332-4616

Ada, OK 74820-6899 E-mail: lchoate@mailclerk.ecok.edu

490 specimens; local emphasis; former collection acronym: ECUM

Northeastern State University, Biological Collections (NSU)

Science Building Contact: (did not respond to survey)

Northeastern State University Tahlequah, OK 74464

1,200 specimens at last report (Yates et al., 1987)

Oklahoma Baptist University, Webster Natural History Museum (WNHM)

500 West University Contact: (did not respond to survey)

Oklahoma Baptist University Shawnee, OK 74801

400 specimens at last report (Yates et al., 1987)

Oklahoma State University, Collection of Vertebrates (OSU)

Department of Zoology Contact: Anthony A. Echelle Oklahoma State University Voice: 405-744-9681 Stillwater, OK 74078 FAX: 405-744-7824

12,893 specimens; collection includes one holotype; frozen-tissue collection (2,479 specimens); contains former collection of Wichita Mountains National Wildlife Refuge (WMWR); additional contacts: Geffery Luttrell and Jim Shaw (voice: 405-744-9675; e-mail: shawjh@okway.okstate.edu)

University of Central Oklahoma, Collection of Vertebrates (UCOCV)

(formerly Central State University, CSUO) Contact: William Caire

Biology Department Voice: 405-341-2980, extension 2722

University of Central Oklahoma FAX: 405-330-3824

Edmond, OK 73034

3,600 specimens; local emphasis

University of Oklahoma, Oklahoma Museum of Natural History (OMNH)

University of Oklahoma
Contact: Michael A. Mares
1335 Asp Avenue
Voice: 405-325-4712
Norman, OK 73019-0606
FAX: 405-325-7699

32,000 specimens; special strengths in mammals of Oklahoma, Mexico, and South America; additional contact: Janet

K. Braun; former collection acronym: OU; ACCREDITED BY ASM (1975 and 1982)

OREGON

Crater Lake National Park Museum Collection (CLNP)

P. O. Box 7 Contact: Mary Benterou

Crater Lake, OR 97604 Voice: 503-594-2211, extension 406

FAX: 503-594-2299

330 specimens; local emphasis (Crater Lake National Park and vicinity)

Eastern Oregon State College, Vertebrate Museum (EOSCVM)

Badgley Hall Contact: Burr J. Betts
Eastern Oregon State College Voice: 503-962-3330
1410 L Avenue FAX: 503-962-3873

La Grande, OR 97850-2899 E-mail: bbetts@eosc.osshe.edu

749 specimens; regional emphasis (northeastern Oregon); former collection acronym: EOSC

Oregon State University, Department of Fisheries and Wildlife Mammal Collection (OSUFW)

Oregon State University
Corvallis, OR 97331-3803
Contact: Bruce Coblentz
Voice: 503-737-1959
EAX: 503-737-3500

FAX: 503-737-3590

E-mail: coblentb@ccmail.orst.edu

11,000 specimens; regional emphasis; contains former Alex Walker Collection; additional contact: Douglas Markle

(voice: 503-737-1970; e-mail: markled@ccmail.orst.edu); ACCREDITED BY ASM (1975 and 1979)

Portland State University, Collection of Vertebrates (PSU)

Department of Biology Portland State University Portland, OR 97207 2,600 specimens at last report (Yates et al., 1987) Contact: Richard Forbes

Southern Oregon State College, Museum of Vertebrate

Department of Biology Southern Oregon State College Ashland, OR 97520

Natural History (SOSCMVNH)

Contact: Stephen P. Cross Voice: 503-552-6749 FAX: 503-552-6415

Contact: (did not respond to survey)

2,575 specimens; regional emphasis E-mail: scross@shasta.sosc.osshe.edu

University of Oregon, Museum of Natural History (UOMNH)

1224 University of Oregon Contact: Don E. Dumond Eugene, OR 97403-1224 Voice: 503-346-5101 FAX: 503-346-5122

3,000 specimens; contains collection of Peromyscus flat skins formerly in the Department of Zoology, University of Oregon; additional contact: Pamela Endzweig (voice: 503-346-5120; e-mail: endzweig@ oregon.uoregon.edu)

Willamette University (WUME)

Department of Biology
Willamette University
900 State Street
Salem, OR 97301
Number of specimens not reported in prior survey (Yates et al., 1987)

PENNSYLVANIA

Academy of Natural Sciences of Philadelphia (ANSP)

Department of Vertebrate Biology
1900 Benjamin Franklin Parkway
Philadelphia, PA 19103-1195
Contact: Curator of Mammals
Voice: 215-299-1078
FAX: 215-299-1028

23,000 specimens; collection includes 195 holotypes; contains historically important series; large mammals of Tibet; African bovids; Neotropical carnivores and primates; includes Wistar Institute and S. N. Rhoads Collections; additional contact: Ted Daeschler (voice: 215-299-1133; e-mail: daeschler@say.acnatsci.org)

Carnegie Museum of Natural History (CM)

Edward O'Neil Research Center

5800 Baum Boulevard

Pittsburgh, PA 15206-3706

Contact: Duane A. Schlitter

Voice: 412-665-2613

FAX: 412-665-2751

E-mail: schlitterd@clpgh.org

113,994 specimens; collection includes 31 holotypes; contains many historically important series; large holdings of mammals from northeastern United States, eastern Arctic, Africa, Suriname, and Brazil; includes former Wayne H. Davis Collection; frozen-tissue collection (14,000 specimens); additional contact: Suzanne B. McLaren (voice: 412-665-2615; e-mail: mclarens@clpgh.org); ACCREDITED BY ASM (1975 and 1984)

Pennsylvania State University (PSU)

School of Forest Resources Bird and Mammal Collection

Pennsylvania State University

University Park, PA 16802

E-mail: rhy@psuvm. psu.edu

2,027 specimens; primarily taxidermy mounts; regional emphasis (Pennsylvania); additional contact: Carolyn G. Mahan (voice: 814-865-1132; e-mail: cgm2@psuvm.psu.edu)

Reading Public Museum (RPM)

500 Museum Road Contact: Michael A. Feyers Reading, PA 19611-1425 Voice: 610-320-8290 3,377 specimens; collection includes one holotype FAX: 610-371-5632

Shippensburg University, Vertebrate Museum (SUVM)

1871 Old Main Drive Contact: Gordon L. Kirkland, Jr. Shippensburg University Voice: 717-532-1407
Shippensburg, PA 17257 FAX: 717-530-4009

E-mail: glkirk@ark.ship.edu

26,500 specimens; important collections from Adirondack Mountains (New York), Pennsylvania, West Virginia, Utah, and Virginia; good series of soricids; additional contact: James A. Hart (voice: 717-532-1145); ACCREDITED BY ASM (1977 and 1987)

State Museum of Pennsylvania (WPMM)

William Penn Memorial Building
P. O. Box 1026
Voice: 717-783-9901
Harrisburg, PA 17108-1026
FAX: 717-783-1073

1,088 specimens; regional emphasis (Pennsylvania)

Wagner Free Institute of Science (WFIS)

Museum of the Wagner Free Institute of Science
Contact: Eugene A. Bolt, Jr.
1700 West Montgomery Avenue
Voice: 215-763-6529
Philadelphia, PA 19121-3227
FAX: 215-763-1299

E-mail: eaboltjr@dolphin.upenn.edu

200 specimens; the Joseph Leidy "Systematics Collection" (1889) is a National Historic Landmark

PUERTO RICO

University of Puerto Rico (PRICO)

206 specimens at last report (Yates et al., 1987)

Department of Biology
University of Puerto Rico
Mayaguez, PR 00708

Contact: (did not respond to survey)

University of Puerto Rico, Caribbean Primate Research Center Museum (CPRC)

Medical Sciences Campus
University of Puerto Rico
Voice: 809-753-8656
San Juan, PR 00936-5067
FAX: 809-767-0788

3,100 specimens; exclusively primates; skeletons of Macaca mulatta from Cayo Santiago; includes Cayo Santiago skeleton collection from Northwestern University; additional contact: Nancy Hong

RHODE ISLAND

Roger Williams Park Museum of Natural History (RWPM)

(formerly Park Museum, PMRI)

Roger Williams Park

Providence, RI 02905

200 specimens; local emphasis

Contact: Marilyn R. Massaro
Voice: 401-785-9451

FAX: 401-941-5920

University of Rhode Island, Mammal Collection (URIMC)

Department of Natural Resources Science
University of Rhode Island
Voice: 401-792-4794
Kingston, RI 02881
FAX: 401-792-4561

1,469 specimens; regional emphasis (Rhode Island) E-mail: pete@edcserv.edc.uri.edu

SOUTH CAROLINA

Charleston Museum (CHM)

121 Rutledge Avenue Contact: (did not respond to survey)
Charleston, SC 29401

Contact: (did not respond to survey)

1,425 specimens (including three holotypes) at last report (Yates et al., 1987)

Clemson University, Vertebrate Collections (CUSC)

132 Long Hall Contact: Stanlee Miller Clemson University Voice: 803-656-3456 Clemson, SC 29634-1903 FAX: 803-656-0435

2,653 specimens; local emphasis; ACCREDITED BY ASM (1986)

SOUTH DAKOTA

Henry Brockhouse Collection (HBC)

2304 West Madison Sioux Falls, SD 57102

55 specimens at last report (Yates et al., 1987)

Pettigrew Museum (PMSD)

Sioux Falls, SD 57102 Contact: (did not respond to survey)

30 specimens at last report (Yates et al., 1987)

Siouxland Heritage Museum (SHM)

200 West 6th Street Contact: (did not respond to survey)
Sioux Falls, SD 57102

125 specimens at last report (Yates et al., 1987)

W. H. Over State Museum (USDAK)

414 East Clark Street Contact: Cleo Kosters
Vermillion, SD 57069 Voice: 605-677-5228

100 specimens; exclusively taxidermy mounts; local emphasis

South Dakota State University (SDAKS)

Mammalogy Teaching Collection Contact: Keith Morrill
Department of Biology and Microbiology Voice: 605-688-4555

South Dakota State University

Brookings, SD 57007 1,850 specimens; primarily taxidermy mounts; local emphasis

University of South Dakota (USD)

Natural History Collection

Department of Biology

Vermillion, SD 57069

Contact: Curator of Mammals

Voice: 605-677-6567

FAX: 605-677-6557

1,565 specimens; regional emphasis (South Dakota); frozen-tissue collection (300 specimens)

N. R. Whitney Collection (NRWC)

633 South Berry Pines Road Contact: Nathaniel R. Whitney Rapid City, SD 57702 Voice: 605-343-2401

310 specimens; local emphasis

Wind Cave National Park (WICA)

Route 1, Box 190-WCNP Contact: Ron Terry
Hot Springs, SD 57747 Voice: 605-745-4600
70 specimens; local emphasis FAX: 605-745-4207

TENNESSEE

Great Smoky Mountains National Park (GRSM)

107 Park Headquarters Road Contact: Kathleen L. Manscill Gatlinburg, TN 37738 Voice: 615-436-1295 FAX: 615-436-1220

500 specimens; local emphasis (mammals of Great Smoky Mountains National Park)

Tennessee Wildlife Resources Agency (TWRA)

Ellington Agricultural Center Contact: Dave Woodward P. O. Box 40747 Voice: 615-781-6502 Nashville, TN 37204 FAX: 615-741-4606

Size of collection not reported; exclusively taxidermy mounts

University of Memphis, Mammal Collection (UM)

Department of Biology
University of Memphis
Contact: Michael L. Kennedy
Voice: 901-678-2581

Memphis, TN 38152 18,000 specimens; ACCREDITED BY ASM (1976)

University of Tennessee, Museum of Zoology (UTMZ)

Department of Zoology
University of Tennessee
Voice: 615-974-6041
Knoxville, TN 37916
FAX: 615-974-0978

650 specimens; frozen-tissue collection (size not reported); additional contact: Greg Anderson (voice: 615-974-6188; e-mail: ganderso@utkvx.bitnet)

TEXAS

Abilene Christian University, Natural History Collection (ACUNHC)

Department of Biology

Abilene Christian University

Abilene, TX 79699

Contact: Thomas E. Lee, Jr.

Voice: 915-674-2574

FAX: 915-674-2009

E-mail: leet@nicanor.acu.edu

220 specimens; local emphasis; frozen-tissue collection (150 specimens)

Angelo State Natural History Collection (ASNHC)

Department of Biology
Angelo State University
San Angelo, TX 76909

Contact: Robert C. Dowler
Voice: 915-942-2189
FAX: 915-942-2229

E-mail: robert.dowler@mailserv.

angelo.edu

9,400 specimens; good holdings of specimens from westcentral Texas and Yucatan Peninsula, Mexico; frozen-tissue collection (1,400 specimens); former acronym: ASVRC; ACCREDITED BY ASM (1992)

Austin College (ACTC)

Department of Biology
Austin College
Voice: 903-813-2204
Sherman, TX 75090
Contact: Steven Goldsmith
Voice: 903-813-2204
E-mail: sgoldsmith@ausing.edu

275 specimens; local emphasis

Baylor University, Strecker Museum (SM)

George W. Carroll Mammal Collection

Baylor University Waco, TX 76798

1,400 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Dallas Museum of Natural History (DMNH)

3535 Grand Avenue (Fair Park)

Dallas, TX 75226

Contact: Alex W. Barker

Voice: 214-421-3466

FAX: 214-428-4356

E-mail: abarker@sun.cis.smu.edu 580 specimens; primarily taxidermy mounts; regional emphasis; includes Herb Klein Collection of trophy mounts

and collection formerly at Southern Methodist University (SMU); additional contact: Gail Manning (voice: 214-421-

3466, extension 232); ACCREDITED BY ASM (1980)

Davis Mountains State Park (DMSP)

Davis Mountains State Park Interpretive Center

Box 786

Fort Davis, TX 79734

30 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Fort Worth Museum of Science and History (FWMSH)

Fort Worth Museum of Science and History Collections

1501 Montgomery Street

Fort Worth, TX 76107

2,100 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Hardin-Simmons University, Collection of Vertebrates (HSUCV)

Department of Biology

Drawer N, HSU Station

Hardin-Simmons University

Abilene, TX 79698

Contact: Allan J. Landwer

Voice: 915-670-1502

FAX: 915-670-1390

E-mail: alandwer@aol.com

331 specimens; regional emphasis (primarily Taylor, Jones, and Callahan counties, Texas); former collection

acronym: HSIMU

Midwestern State University (MWSU)

Collection of Recent Mammals Contact: Frederick B. Stangl, Jr.

Department of Biology Voice: 817-689-4408 Midwestern State University FAX: 817-689-4442

Wichita Falls, TX 76308 E-mail: stanglf@nexus.mwsu.edu

20,020 specimens; regional emphasis (primarily Trans-Pecos, Panhandle, and northcentral regions of Texas);

ACCREDITED BY ASM (1975 and 1988)

Pan American University, Mammal Collection (PAUMC)

Department of Biology
Pan American University
Conta

Edinburg, TX 78539

750 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Panhandle-Plains Historical Museum (PPHM)

Natural History Collections Box 967, WT Station Canyon, TX 79016

225 specimens at last report (Yates et al., 1987)

Contact: A. J. Taylor Voice: 806-656-2259

Sam Houston State University, Vertebrate Natural History Collection (SHSU)

Department of Biological Sciences

Sam Houston State University

Voice: 409-294-3746

Huntsville, TX 77341

FAX: 409-294-3822

650 specimens; local emphasis

E-mail: bio_mlt@shsu.edu

Sul Ross State University (SRSU)

Vertebrate Collection

Department of Biology

Sul Ross State University

Alpine, TX 79832

Contact: Curator of Mammals

Voice: 915-837-8112

FAX: 915-837-8046

2,797 specimens; regional emphasis

Tarleton State University, Tarleton State Collection (TSC)

Department of Biological Science Contact: Philip D. Sudman Tarleton State University Voice: 817-968-9154 Stephenville, TX 76402 FAX: 817-968-9157

1,000 specimens at last report (Yates et al., 1987) E-mail: sudman@vms.tarleton.edu

Texas A&I University, Texas A&I Collections (TAIU)

Texas A&I University Contact: (did not respond to survey)

Box 158 Kingsville, TX 78363

1,200 specimens at last report (Yates et al., 1987)

Texas A&M University, Texas Cooperative Wildlife Collection (TCWC)

Department of Wildlife and Fisheries Sciences

Texas A&M University

College Station, TX 77843

College Station, TX 77843

E-mail: rhoneycutt@tamu.edu

56,500 specimens; collection includes 39 holotypes; major emphases in mammals of Texas, Mexico, and Central America; frozen-tissue collection (5,000 specimens); includes former collection of University of North Texas (NTSU—formerly North Texas State University); additional contact: George D. Baumgardner (voice: 409-845-5783;

FAX: 409-845-5786; e-mail: g-baumgardner@tamu.edu); ACCREDITED BY ASM (1975 and 1984)

Texas Tech University, Museum of Texas Tech University (TTU)

Natural Science Research Laboratory

Texas Tech University

Box 43191

Lubbock, TX 79409-3191

Contact: Robert J. Baker

Voice: 806-742-2485

FAX: 806-742-1136

E-mail: bjrjb@ttacs.ttu.edu

70,000 specimens; collection includes 13 holotypes; noteworthy holdings of southwestern rodents and Neotropical bats; Chernobyl specimens; frozen-tissue collection (50,000 specimens); additional contact: Richard Monk (voice: 806-742-2486); home page: www.nsrl.ttu.edu; ACCREDITED BY ASM (1975 and 1983)

Texas Wesleyan College, Museum of Zoology (TWC)

Texas Wesleyan College Contact: (did not respond to survey)

Fort Worth, TX 76105

429 specimens at last report (Yates et al., 1987)

University of Mary Hardin-Baylor (UMHB)

Collection of Mammals

Contact: (did not respond to survey)

Department of Biology

University of Mary Hardin-Baylor

Belton, TX 76513

415 specimens at last report (Yates et al., 1987)

University of Texas at Arlington (UTA)

Collection of Vertebrates

Department of Biology

University of Texas

Contact: J. A. Campbell

Voice: 817-273-2406

FAX: 817-273-2855

Arlington, TX 76019 E-mail: campbell@albert.uta.edu

2,500 specimens; regional emphasis; former collection acronym: UTACV

University of Texas at Austin, Laboratory of Physical Anthropology (UTLPA)

Department of Anthropology
University of Texas
Austin, TX 78712-1086

Contact: Liza Shapiro
Voice: 512-471-7533
FAX: 512-471-6535

E-mail: liza.shapiro@mail.utexas.edu

270 specimens; important skeleton collection of Papio; additional contacts: Claud Bramblett and John Kappelman

(voice: 512-471-4206)

University of Texas at Austin, Texas Natural History Collection (TNHC)

University of Texas Contact: Carol K. Malcolm 2400 Trinity Street Voice: 512-471-8845
Austin, TX 78705 FAX: 512-471-9775

E-mail: cmalcolm@utxvms.cc.utexas.edu

8,000 specimens; regional emphasis (Texas); ACCREDITED BY ASM (1976)

University of Texas at Austin, Vertebrate Paleontology Lab (TMM)

J. J. Pickle Research Campus

University of Texas

Austin, TX 78712

Contact: Ernest Lundelius

Voice: 512-471-6087

FAX: 512-471-5973

E-mail: mcwinans@bongo.cc.utexas.edu

7,200 specimens; emphasis on skeletal material; regional emphasis (Texas); Australian marsupials; additional contact: Melissa C. Winans

University of Texas at El Paso, Centennial Museum (UTEP)

Mammal Division Contact: Arthur H. Harris
Laboratory for Environmental Biology Voice: 915-747-6985 or 747-6835

University of Texas FAX: 915-747-5808

El Paso, TX 79968-0519 E-mail: ai01%utep@utepvm.ep.utep.edu

8,407 specimens; emphasis on mammals of southwestern United States; ACCREDITED BY ASM (1977)

Wayland University (WU)

Llano Estacado Museum Plainview, TX 79072

1,125 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

Welder Wildlife Foundation (WWF)

P. O. Box 1400 Contact: Selma Glasscock Sinton, TX 78387 Voice: 512-364-2643 1,060 specimens; regional emphasis (southern Texas) FAX: 512-364-2650

West Texas A&M University Natural History Collection (WTSU)

Department of Biology and Geosciences

West Texas A&M University

Canyon, TX 79016

Zanyon, TX 79016

Canyon, TX 79016

Canyon, TX 79016

Canyon, TX 79016

E-mail: kblair@wtamu.edu

Witte Memorial Museum (WMM)

San Antonio Museum Association Contact: (did not respond to survey)

P. O. Box 2601 San Antonio, TX 78299

273 specimens at last report (Yates et al., 1987)

UTAH

Brigham Young University, Monte L. Bean Life Science Museum (BYU)

Brigham Young University

Provo, UT 84602-0200

Contact: Duke S. Rogers

Voice: 801-378-5491

FAX: 801-378-3733

E-mail: rogersd@acd1.byu

15,500 specimens; collection emphasizes mammals of Utah and Nevada (especially Nevada test site); includes collection formerly at Utah State University (USU); frozen-tissue collection (2,800 specimens); additional contact: H.

Duane Smith (e-mail: duane@museum.byu.edu); ACCREDITED BY ASM (1991)

Bryce Canyon National Park (BCNP)

National Park Service Museum Collections

Contact: (did not respond to survey)

Bryce Canyon, UT 84717

150 specimens at last report (Yates et al., 1987)

Cedar Breaks National Monument (CBNM)

Biological Collections Contact: (did not respond to survey)

P. O. Box 749 Cedar City, UT 84720

25 specimens at last report (Yates et al., 1987)

Dinosaur Natural History Museum (DNHM)

Natural History Collections Contact: (did not respond to survey)

235 East Main Vernal, UT 84078

155 specimens at last report (Yates et al., 1987)

Dixie College, Natural History Museum (DIX)

Natural Sciences Contact: Andrew H. Barnum
Dixie College Voice: 801-652-7771
St. George, UT 84770 E-mail: barnum@cc.dixie.edu

785 specimens; local emphasis

National Park Service (NBNM)

Arches National Park, Canyonlands National Park, and Contact: Vicki B. Webster

Natural Bridges National Monument Collections Voice: 801-259-3911, extension 2136

Southeast Utah Group FAX: 801-259-8628

2282 S. West Resource Boulevard

Moab, UT 84532-8000

128 specimens; local emphasis (within National Park boundaries); additional contact: Nancy Coulam

Timpanogos Cave National Monument (TCNM)

RR 3, Box 200 Contact: Rodney D. Horrocks American Fork, UT 84003 Voice: 801-756-5239

FAX: 801-756-5661

18 specimens; local emphasis (within National Monument boundaries)

University of Utah, Utah Museum of Natural History (UMNH)

University of Utah
Salt Lake City, UT 84112
Contact: Eric A. Rickart
Voice: 801-581-6927

FAX: 801-585-3684

E-mail: rickart@geode.umnh.utah.edu

29,400 specimens; collection includes 40 holotypes; emphasis on intermountain west, particularly Utah; includes former Environmental Laboratory and Dugway Proving Grounds collections; former collection acronym: UU;

ACCREDITED BY ASM (1975 and 1993)

Utah Field House of Natural History State Park (UFHNH)

235 East Main Contact: Sue Ann Bilbey Vernal, UT 84078 Voice: 801-789-3799

FAX: 801-789-4883

150 specimens; local emphasis; additional contact: Alden H. Hamblin

Weber State University, Bird and Mammal Collection (WSU)

(formerly Weber State College, WEBSC)

Department of Zoology

Weber State University

Contact: Samuel I. Zeveloff
Voice: 801-626-6655

FAX: 801-626-7445

Ogden, UT 84408-2505 E-mail: szevelof@scinet.weber.edu

2,042 specimens; local emphasis; additional contact: Ron Meyers (voice: 801-626-6170)

Zion National Park (ZNP)

Zion National Park Museum CollectionContact: Denny DaviesSpringdale, UT 84767-1099Voice: 801-772-3256230 specimens; local emphasisFAX: 801-772-3426

VERMONT

Fairbanks Museum and Planetarium Collection (FMPC)

Main and Prospect Streets

Contact: Howard B. Reed, Jr.
St. Johnsbury, VT 05819

Voice: 802-748-2372

FAX: 802-748-3347

250 specimens; emphasis on New England species; historically important series of taxidermy mounts; includes Hood Museum and Franklin Fairbanks collections; additional contact: Stephen H. Amos; former collection acronym: FMNS

Lyndon State College, Mammal Collection (VSC-L)

Department of Science Contact: Donald H. Miller

Lyndon State College Voice: 802-626-9371, extension 246 Lyndonville, VT 05851 E-mail: millerd@queen.lsc.vsc.edu

350 specimens; exclusively taxidermy mounts (with skulls); local emphasis

Montshire Museum of Science (MMS)

P. O. Box 770 Contact: Joan Waltermire Norwich, VT 05055 Voice: 802-649-2200

FAX: 802-649-3637

E-mail: linda.levin@valley.net

Size of collection not reported (collection currently in storage)

University of Vermont, Zadock Thompson Natural History Collections (ZTNH)

Department of Zoology

University of Vermont

Burlington, VT 05405-0086

Contact: C. William Kilpatrick

Voice: 802-656-0453

FAX: 802-656-2914

E-mail: wkilpatr@moose.uvm.edu

9,000 specimens; frozen-tissue collection (7,500 specimens); includes Harold B. Hitchcock Collection and Monshire Museum Collection (part); former acronym: UVMZ

Vermont Fish and Wildlife Department (VFWD)

Addison Collection Contact: John Campbell Voice: 802-759-2398

RD 1, Box 1175 Vergennes, VT 05491

225 specimens; local emphasis; additional contact: Tom Myers (voice: 802-878-1564; FAX: 802-879-3871)

VIRGINIA

Virginia Commonwealth University (VCU)

Mammal Collection Contact: John F. Pagels
Department of Biology Voice: 804-828-1562
Virginia Commonwealth University FAX: 804-828-0503

Richmond, VA 23284-2012

11,600 specimens; local emphasis (small mammals of the mid-Atlantic region)

Virginia Museum of Natural History (VMNH)

1001 Douglas Avenue Contact: Nancy D. Moncrief Martinsville, VA 24112 Voice: 540-666-8614

FAX: 540-632-6487

E-mail: moncrief@amazon.evsc.virginia.edu

1,584 specimens; frozen-tissue collection (1,000 specimens)

Virginia Polytechnic University, Mammal Museum (VPIMM)

Virginia Polytechnic Institute and State University

Biology Department Blacksburg, VA 24061

600 specimens at last report (Yates et al., 1987)

Contact: (did not respond to survey)

WASHINGTON

National Marine Mammal Laboratory (NMML)

Osteological Collection Contact: Bob DeLong
7600 Sand Point Way NE Voice: 206-526-4038
Seattle, WA 98115 FAX: 206-526-6615

E-mail: delong@afsc.noaa.gov

1,709 specimens; collection emphasizes marine mammals of the northern Pacific; includes the former John G. Sinclair Collection; additional contact: James R. Thomason (voice: 206-526-6681; FAX: 206-526-6615; e-mail: thomason@afsc.noaa.gov); former collection acronym: NMFS

Olympic National Park (ONP)

600 East Park Avenue Contact: Susan Schultz Port Angeles, WA 98362 Voice: 360-452-4501

100 specimens; regional emphasis (Olympic Peninsula, Washington)

University of Puget Sound, James R. Slater Museum of Natural History (PSM)

University of Puget Sound Contact: Dennis R. Paulson Tacoma, WA 98416-0360 Voice: 206-756-3798 E-mail: dpaulson@ups.edu

28,000 specimens; collection includes two holotypes; regional emphasis (northwestern United States); repository for Canis rufus specimens; additional contact: Gary W. Shugart (voice: 206-756-3356; e-mail: gshugart@ups.edu); ACCREDITED BY ASM (1975)

University of Washington, Thomas Burke Memorial Washington State Museum (UWBM)

DB-10, University of Washington

Seattle, WA 98195

Contact: G. J. Kenagy
Voice: 206-616-1781

FAX: 206-685-3039

E-mail: kenagy@u.washington.edu

40,000 specimens; collection includes one holotype; emphasis on northwestern North America; includes former E. S. Booth Collection (BC) and Walla Walla College Collection (WWC); frozen-tissue collection (1,500 specimens); additional contact: John Rozdilsky (voice: 206-685-7417; e-mail: jrozdil@u.washington.edu); former collection acronym: UW-WSM; ACCREDITED BY ASM (1975)

Washington Game Department (WGD)

600 North Capitol Way
Contact: (did not respond to survey)
Olympia, WA 98501
200 specimens at last report (Yates et al., 1987)

Washington State University, Charles R. Conner Museum (CRCM)

Washington State University

Pullman, WA 99164-4236

Contact: Richard E. Johnson

Voice: 509-335-1977 or 335-3553

FAX: 509-335-3517

32,500 specimens; collection emphasizes northwestern North America; includes former Irven O. Buss Collection (IOBC); additional contact: Kevin Pullen (voice: 509-335-3515); ACCREDITED BY ASM (1977)

Whitman College (WCW)

Biology Department Contact: Charles M. Drabek
Whitman College Voice: 509-527-5227
Walla Walla, WA 99362 FAX: 509-527-5904
2,750 specimens; regional emphasis E-mail: in%"drabek@whitman.edu

WEST VIRGINIA

Marshall University, West Virginia Mammal Survey (WVMS)

N. B. Green Vertebrate Collections
 Department of Biological Sciences
 Marshall University
 Huntington, WV 25755
 Contact: Mary Etta Hight
 Voice: 304-696-6692
 FAX: 304-696-3243
 E-mail: hight@marshall.edu

6,424 specimens; regional emphasis (West Virginia)

WISCONSIN

Jay S. Haft Collection (JSHC)

Department of Anatomy

Medical College of Wisconsin

561 North 15th Street Milwolco WI 53233

561 North 15th Street, Milwakee, WI 53233 200 specimens at last report (Yates et al., 1987)

University of Wisconsin, Milwaukee, Department of Anthropology (UWMA)

University of Wisconsin Contact: (did not respond to survey)

Milwaukee, WI 53201

625 specimens at last report (Yates et al., 1987)

University of Wisconsin, Milwaukee, Department of Biological Sciences (UWMIL)

University of Wisconsin Contact: Donna Van Wynesburghe

Milwaukee, WI 53201 Voice: 414-229-4214 50 specimens; local emphasis; additional contact: Keith Chipman (voice: 414-229-4558)

University of Wisconsin, Stevens Point, Museum of Natural History (UWSP)

Mammal Collection Contact: Charles A. Long University of Wisconsin Voice: 715-346-2455

Stevens Point, WI 54481

8,200 specimens; regional emphasis (Wisconsin); PROVISIONALLY ACCREDITED BY ASM (1994)

University of Wisconsin, Zoological Museum (UWZM)

250 North Mills Street Contact: Frank A. Iwen

University of Wisconsin Voice: 608-262-3766 or 262-3159

Madison, WI 53706 FAX: 608-262-5395

E-mail: uwzmiwen@macc.wisc.edu

24,000 specimens; collection includes one holotype; many historically important series; placentae and fetal material; frozen-tissue collection (2,500 specimens); includes former W. B. Quay Collection, Harland W. Mossman Collection, and Milton College Collection; additional contact: E. Elizabeth Pillaert (e-mail: pillaert@macc.wisc.edu); former collection acronym: UWZ; ACCREDITED BY ASM (1975 and 1983)

WYOMING

Casper College (CCW)

Biology Department Casper College Casper, WY 82601 Contact: (did not respond to survey)

Contact: (did not respond to survey)

71

700 specimens at last report (Yates et al., 1987)

Grand Teton National Park (GTNP)

Box 67 Contact: (did not respond to survey)

Moose, WY 83012

24 specimens at last report (Yates et al., 1987)

Teton Science School (TSSMC)

 Murie Museum
 Contact: John McLaughlin

 P. O. Box 68
 Voice: 307-733-4765

 Kelly, WY 83011
 FAX: 307-739-9388

3,100 specimens; historically important collections of Olaus and Adolph Murie

Werner Wildlife Museum (WWM)

Mammal Collection 405 East 15th Street Casper, WY 82061 250 specimens at last report (Yates et al., 1987)

VENEZUELA

Colección de Mastozoológia (MHNLS)

Edificio Fundación La Salle
Avenida Boyaca Mariperez
Apartado 1930

Contact: Belkis Rivas
Voice: 582-782-8711
FAX: 582-793-7493

Caracas 1010-A, Venezuela

11,000 specimens; collection includes 12 holotypes of Venezuelan mammals

Museo de la Estación Biológica de Rancho Grande (EBRG)

MARNR-PROFAUNA Contact: Javier Sanchez
Apartado 184 Voice and FAX: 58-4-383-8264

Maraca y 2101-A

Estado Áragua, Venezuela

20,000 specimens; mostly Venezuelan mammals; additional contact: Francisco Bisbal

Universidad Central de Venezuela (MBUCV)

Museo de Biología

Apartado 47058

Caracas 1041-A, Venezuela

Contact: Roger Perez Hernandez

Voice: 58-2-662-7895

E-mail: rperez@dino.conicit.ve

5,264 specimens; collection emphasizes Venezuelan mammals; additional contact: Carmen Ferrira

Universidad de Los Andes (CVULA)

Colección de Vertebrados Facultad de Ciencias, La Hechicera Universidad de Los Andes Merida 5101, Venezuela Contact: P. Soriano M. Voice: 58-74-401305 FAX: 58-74-401280

E-mail: soriano@ciens.ula.ve

72 HAFNER, GANNON, SALAZAR-BRAVO, AND ALVAREZ-CASTAÑEDA

8,500 specimens; mostly bats and rodents from eastern Venezuela; additional contacts: Jaime Pefaur (pefaur@ciens.ula.ve) and Jesus Molinari (molinari@ciens.ula.ve)

APPENDIX I

LATIN AMERICAN COLLECTIONS THAT DID NOT RESPOND TO THIS SURVEY

Latin American collections known (or presumed) to exist for which no survey response was received. We invite the persons responsible for these collections to contact the chair of the ASM Systematic Collections Committee so that their collections will be included in the next listing.

ARGENTINA

Centro Nacional Patagónico (CNP), 28 de Julio 28, 9120 Puerto Madryn, Chubut, Argentina

Colección de Mamíferos de Elio Massoia y Flia (CEMF), Avenida Angel Gallardo 470, Casilla de Correo 220, 1405 Buenos Aires, Argentina

Museo de Ciencias Naturales y Centro de Investigación, Instituto del Profesorado "Antonio R. de Montoya," San Luis 384, 3300 Posadas, Misiones, Argentina

Museo de Historia Natural de San Rafael, San Rafael, Mendoza, Argentina

Museo de la Patagonia, Colección mastozoológica, 8400 San Carlos de Bariloche, Río Negro, Argentina

Museo de Ciencias Naturales "Juan Forester," 3384 Monte Carlo, Misiones, Argentina

Museo de Ciencias Naturales, Universidad Nacional de Salta, 4400 Salta, Argentina

Museo de Ciencias Naturales de Azul (MCNA), Olavarria 369, 7300 Azul, Buenos Aires, Argentina

BELIZE

Belize College of Arts, Science and Technology (BELCAST), Belize City, Belize

BOLIVIA

Museo de Historia Natural "Dr. Mario Deheza N." (MHNMD), Universidad Mayor de San Francisco Xavier, Casilla 212, Sucre, Bolivia

BRAZIL

Coleção Adriano L. Peracchi, Insituto de Biologia, Universidad Rural, 23460 Seropédica, Rio de Janeiro, Brasil

Coleção Deoclécio Guerra (DG), Departemento Biologia, Universidad Federal de Pernambuco, Cidade Universitaria, 50000 Recife, Pernambuco, Brasil

Coleção Privado de Estanislau Kostka Pinto de Silveira, c/o Maria Consuelo P. da Silveira, Rua Evaristo da Veiga, 45/302 Cinelândia, 20,000 Rio de Janeiro, Brasil

Departamento dos Mamiferos Aquaticas, Instituto Nacional de Pesquisas da Amazonia, 69000 Manaus, Amazonas, Brasil

Museu "Ångelo Moreira da Costa Lima," Avenida Feliciano Coelho 1509, 68900 Macapá, Amapá, Brasil

Museu Paraense "Emílio Goeldi" (MPEG), Caixa Postal 399, 66.040 Belém, Pará, Brasil

Universidade Estadual de Campinas (ZUEC), Zoologia, Caixa Postal 1170, Campinas 13100, São Paulo, São Paulo, Brasil

Universidade Estadual Paulista (UNESP), Departamento de Zoologia, Instituto de Biociéncias, 1500100 São José do Rio Preto, São Paulo, Brasil

Museu de Historia Natural, Mastozoologia, Bosque de Jequitibas, 13.100 Campinas, São Paulo, Brasil

Universidad Federal de Paraiba, Departamento Biologia, Campus Universitario, 58000 João Pessoa, Paraiba, Brasil

Universidade do Vale do Rio dos Sinos, Museu de Zoologia da UNISINOS, Avenida Unisinos 950, Caixa Postal 275, 93.000 São Leopoldo, Rio Grande do Sul, Brasil

COLOMBIA

Museo de Ciencias Naturales del Colegio de San José, Apartado Aereo 1180, Medellín, Antioquia, Colombia

Museo Departamental de Historia Natural, Mastozoología, Apartado Aereo 5621, Cali, Colombia

Museo del Instituto de La Salle, Calle 11, Numero 1-69, Apartado Aereo 27389, Santa Fé de Bogotá, Colombia

Universidad Industrial de Santander (UIS), Museo de Historia Natural, Escuela de Biología, Apartado Aéreo 678, Bucaramanga, Colombia

CUBA

Museo y Biblioteca de Zoología, Calle 42, Numero 3307, Mariano 13, La Habana, Cuba

Museo "Felipe Poey," Capitolio Nacional, Calle 25 entre "J" e "I," Vedado, La Habana, Cuba

DOMINICAN REPUBLIC

Museo Nacional de Historia Natural, Departamento de Zoología, Plaza de la Cultura "Cesar Nicolás Penson," Santo Domingo, República Dominicana

ECUADOR

Instituto Nacional "Mejía," Avenida América, Quito, Ecuador

Museo de Ciencias Naturales "Colegio Maldonado," 1ra Constituyente, entre Larrea y España, Riobamba, Ecuador

Museo de Historia Natural "Escuela Politécnica del Litoral," Escuela de Ciencias Naturales, Escuela Politécnica del Litoral, Guayaquil, Ecuador

Museo de Historia Natural-Galapagos, Puerto Baquerizo Moreno, San Cristobal, Galápagos, Ecuador

Universidad de Guayaquil, Museo de Ciencias Naturales, Facultad de Ciencias Naturales, Casilla 471, Guayaquil, Ecuador

Universidad "Luis Vargas Torres," Museo de Ciencias Naturales "Luis Vargas Torres," Escuela de Ciencias Naturales, Esmeraldas, Ecuador

GUATEMALA

Museo Nacional de Historia Natural, Mastozoología, 6a Calle, 7-30, Zona 13, Apartado Postal 987, Ciudad Guatemala, **Guatemala**

Universidad del Valle, Departamento de Biología, Apartado Postal 82, Ciudad Guatemala, Guatemala

GUYANA

The Guyana Museum and Zoo, North Road, Georgetown, Guyana

University of Guyana, Center for the Study of Biodiversity, Georgetown, Guyana

HAITI

Institut de Sauvegarde du Patrimoine National (ISPAN), 77 Chemin des Dalles, B. P. 2484, Port-au-Prince, Haiti

HONDURAS

Museo Animal, Departamento de Vida Silvestre, Dirección General de Recursos Naturales Renovables, Tegucigalpa, Honduras

JAMAICA

The Institute of Jamaica, Science Museum, Natural History Division, Kingston, Jamaica

MEXICO

Centro Intercultural para el estudio de Desiertos y Océanos (CEDO), Apartado Postal 53, Puerto Peñasco, Sonora 83550, México

Colección del Instituto Nacional de Antropología e Historia (PH), Subdirección de Servicios Académicos, Laboratorio de Paleomastozoología, Moneda 16, Colonia Centro, México, Distrito Federal 06060, México

Instituto Tecnológico de Estudios Superiores de Monterrey - Unidad Guaymas (ITESM), Colección de Mastozoología, Apartado Postal 484 Guaymas, Sonora 85400, México

Universidad Autónoma del Estado de Morelos (UAEM), Colección de Mamíferos del Centro de Investigaciones Biológicas, Avenida Universidad 1001, Colonia Chamila, Cuernavaca, Morelos 66210, México

Universidad Autónoma de Puebla (UAP), Escuela de Biología, 4 Sur 104, Centro Puebla, Puebla 72000, México

Universidad de Guadalajara (LNLJ), Colección de Mamíferos, Instituto Manantlán de Ecología y Conservación de la Biodiversidad, Departamento de Ecología y Recursos Naturales, Nicolás Bravo 66, El Gurullo, Jalisco 48740, México

Universidad Nacional Autónoma de México, Facultad de Ciencias, (FC-UNAM), Colección de Mamíferos de la Facultad de Ciencias, Apartado Postal 70-399, México, Distrito Federal 04510, México

NICARAGUA

Universidad Nacional Autónoma de Nicaragua, Escuela de Biología, Departamento de Zoología, León, Nicaragua

Museo de Zoología, Instituto Nicaragüense de Recursos Naturales y del Ambiente, Km. 12.5, Carreterra Norte, Apartado 5123, Managua, Nicaragua

PARAGUAY

Museo de Historia Natural, Vivero Forestal, Entidad Binacional Itaipu, Casilla de Correo 381, Ciudad del Este, Hernanderias, Paraguay

PERU

Instituto del Mar del Perú, Esquina Gamarra y General Valle, Casilla Postal 22, Callao, Perú

Universidad Nacional de la Amazonia Peruana, Museo de Zoología, Apartado 496, Iquitos, Perú

Universidad Nacional de Cusco, Departamento de Zoología, Casilla Postal 423, Cusco, Perú

Universidad Nacional de Trujillo, Departamento de Zoología, San Martin 380, Trujillo, Perú

Universidad "Ricardo Palma," Laboratorio de Zoología, Facultad de Ciencias Biológicas, Apartado 797, Lima 18, Perú

URUGUAY

Insituto de Biología, Sección Zoología Vertebrados (ZVC), Facultad de Humanidades y Ciencias, Universidad de la República, Tristán Narvaja 1674, Montevideo 11200, Uruguay

Laboratorio de Evolución, Facultad de Ciencias. Tristán Narvaja 1674, Montevideo 11200, Uruguay

Museo Nacional de Historia Natural, Buenos Aires 562, Casilla de Correo 399, Montevideo, Uruguay

Museo "Damaso Antonio Larranaga," República de Chile 4215, Montevideo, Uruguay

VENEZUELA

Instituto de Investigaciones Veterinarias (IIV), Sección de Rabia, Apartado 70, Maracay 300, Estado Aragua, Venezuela

Museo de Ciencias Naturales (MCN), Universidad Simón Bolivar, Apartado Postal 80659, Caracas 1080-A, Venezuela

Museo del Instituto de Zoología Agrícola, Universidad Central de Venezuela, Maracay, Venezuela

Universidad de Zulia, Centro de Investigaciones Biológicas, Facultad de Humanidades, Apartado Postal 526, Maracaibo, Estado Zulia, Venezuela

APPENDIX II

COLLECTIONS THAT HAVE BEEN INCORPORATED INTO OTHER COLLECTIONS

This list includes only those transfers not listed in the previous survey report (Yates et al., 1987).

Collection transferred Repository

BRITISH COLUMBIA

Dun-Waters Collection Kelowna Museum (KM)

MANITOBA

Delta Waterfowl Research Station Manitoba Museum of Man and Nature (MMMN)
University of Manitoba Collection (part) Manitoba Museum of Man and Nature (MMMN)

ONTARIO

Wistar Institute Collection (part)
C. H. Buckner Collection
Canadian Museum of Nature (CMN)
Royal Ontario Museum (ROM)
Royal Ontario Museum (ROM)
R. G. Lanning Collection
Royal Ontario Museum (ROM)
R. Brooman Collection
Royal Ontario Museum (ROM)

CALIFORNIA

Harry Coombs Collection

L. M. Huey Collection

San Diego Natural History Museum (SDNHM)

S. G. Jewett Collection

San Diego Natural History Museum (SDNHM)

United States Geological Survey Collection San Jose State University (MBM)

Jack C. VonBloeker, Jr. Collection (part)

Santa Barbara Museum of Natural History (SBMNH)

M. Hildebrand Collection

D. R. Dickey Collection (part)

University of California, Berkeley (MVZ)

University of California, Berkeley (MVZ)

University of California, Davis (MWFB)

CONNECTICUT

Marsh Osteological Collection Yale University (YPM)
Morden African Collection Yale University (YPM)

FLORIDA

Albert Schwartz Collection University of Kansas (KU)
University of Miami, Coral Gables Collection University of Kansas (KU)

ILLINOIS

Northwestern University Collection

B. J. Hayward Collection

W. W. Goodpaster Collection

Edward Taylor Collection

Southern Illinois University, Cooperative

Chicago Academy of Sciences (CHAS)

Field Museum (FMNH)

University of Illinois (UIMNH)

University of Illinois (UIMNH)

Wildlife Research Laboratory (CWRL)

Southern Illinois University (SIUCM)

IOWA

W. T. Hornaday Australian Collection University of Iowa (IOWA)
Central College, Pella, IA Collection (part) University of Iowa (IOWA)

KANSAS

C. A. Ely Collection (part)

Museum of the High Plains Collection (MHP)

Fort Hays State University, Sternberg Museum (MHP)

Fort Hays State University, Sternberg Museum (MHP)

Ralph Ellis Collection University of Kansas (KU)

Collection transferred Repository

LOUISIANA

University of Southwestern Louisiana Louisiana State University (LSUMZ)

MASSACHUSETTS

David A. Lovejoy Collection Westfield State College (WSC)

MICHIGAN

Lee R. Dice *Peromyscus* Collection University of Michigan (UMMZ)

MINNESOTA

F. J. Jannett Collection The Science Museum of Minnesota (SMM)

MISSOURI

Kansas City Museum Collection University of Kansas (KU)

NEBRASKA

Edson Fichter Collection
University of Nebraska State Museum (UNSM)
University of Nebraska, Omaha Collection
University of Nebraska State Museum (UNSM)

NEVADA

J. R. Alcorn Collection Nevada State Museum and Historical

Society (NSMHS)

NEW MEXICO

Biological Surveys Collection, Fort Collins, CO University of New Mexico (MSB)

NEW YORK

Bluntchli Embryological Collection

J. J. Reedy Collection (Niagara University)

St. Bonaventure University Collection

American Museum of Natural History (AMNH)

Buffalo Society of Natural Sciences (BSNS)

New York State Museum (NYSM)

OHIO

University of Cincinnati Collection Cincinnati Museum of Natural History (CMNH)
Wayne H. Davis Collection Carnegie Museum of Natural History (CM)

PUERTO RICO

Northwestern University Collection (part)

University of Puerto Rico (CPRC)

TEXAS

Herb Klein Collection

Southern Methodist University Collection
University of North Texas Collection

Dallas Museum of Natural History (DMNH)
Dallas Museum of Natural History (DMNH)
Texas A&M University (TCWC)

UTAH

Utah State University Collection

Environmental Laboratory Collection

Brigham Young University (BYU)

University of Utah (UMNH)

VERMONT

Hood Museum Collection Fairbanks Museum and Planetarium (FMPC)
Franklin Fairbanks Collection Fairbanks Museum and Planetarium (FMPC)
Monshire Museum Collection (part) University of Vermont (ZTNH)

WASHINGTON

John G. Sinclair Collection

Walla Walla College Collection

Irven O. Buss Collection

National Marine Mammal Laboratory (NMML)

University of Washington (UWBM)

Washington State University (CRCM)

WISCONSIN

Milton College Collection University of Wisconsin (UWZM)

APPENDIX III

BIBLIOGRAPHY OF CATALOGUES OF TYPE SPECIMENS IN COLLECTIONS OF MAMMALS IN THE WESTERN HEMISPHERE

- ALLEN, G. M. 1931. Type specimens of mammals in the Museum of Comparative Zoology. Bulletin of the Museum of Comparative Zoology, 71:229-289.
- AVILA PIRES, F. D. 1968. Tipos de mamíferos recentes do Museu Nacional, Rio de Janeiro. Arquivos do Museu Nacional, 53:161-191.
- BOND, S. I. 1969. Type specimens of mammals in the San Diego Natural History Museum. Transactions of the San Diego Society of Natural History, 15:252-263.
- CSUTI, B. 1980. Type specimens of Recent mammals in the Museum of Vertebrate Zoology, University of California, Berkeley. University of California Publications in Zoology, 114:1-75.
- DOUTT, J. K. 1934. List of the types of mammals in the Carnegie Museum. Annals of the Carnegie Museum, 22:317-321.
- GOODWIN, G. G. 1953. Catalogue of type specimens of Recent mammals in the American Museum of Natural History. Bulletin of the American Museum of Natural History, 102:207-412.
- GREEN, G. D., and A. E. PEDEN. 1992. Type specimens of animals and plants in the collection of the Royal British Columbia Museum. Royal British Columbia Museum, Victoria, 28 pp.
- HAFNER, M. S. 1993. Mammalogical type specimens in the Museum of Natural Science, Louisiana State University. Occasional Papers of the Museum of Natural Science, Louisiana State University, 67:1-12.
- HOOPER, E. T. 1977. Type specimens of Recent mammals in the Museum of Zoology, University of Michigan. Occasional Papers of the Museum of Zoology, University of Michigan, 680:1-22.
- HUMPHREY, S. R. 1974. Recent mammals. P. 120, *in* Catalog of type specimens in the Department of Natural Sciences, Florida State Museum (C. R. Gilbert, ed.). Bulletin of the Florida State Museum, Biological Science, 18:101-120.
- JONES, C. A. 1994. Type specimens of mammals in The Denver Museum of Natural History. Proceedings of the Denver Museum of Natural History, 6:1-4.
- JONES, J. K., Jr., and H. H. GENOWAYS. 1969. Holotypes of Recent mammals in the Museum of Natural History, University of Kansas. Miscellaneous Publications of the University of Kansas Museum of Natural History, 51:129-146.
- JONES, J. K., Jr., R. S. HOFFMANN, and S. K. KORTLUCKE. 1984. Holotypes of Recent mammals in the Museum of Natural History, University of Kansas, 1969-1982. Occasional Papers of the University of Kansas Museum of Natural History, 112:1-5.
- KOOPMAN, K. F. 1973. Catalogue of type specimens of Recent mammals in the Academy of Natural Sciences of Philadelphia. Proceedings of the Academy of Natural Sciences of Philadelphia, 128:1-24.
- LAWRENCE, M. A. 1993. Catalog of Recent mammal types in the American Museum of Natural History. Bulletin of the American Museum of Natural History, 217:1-200.
- MAYER, W. V. 1949. Catalogue of type specimens of mammals in the Natural History Museum of Stanford University. Proceedings of the California Zoology Club, 1:29-32.
- OCHOA, G. J. 1989. Revisión de los ejemplares tipo de mamíferos recientes en colecciónes venezolanas. Biollania, 6:1-13.
- POOLE, A. J., and V. S. SCHANTZ. 1942. Catalog of the type specimens of mammals in the United States National Museum, including the Biological Surveys Collection. Bulletin of the United States National Museum, 173:1-705.
- RICKART, E. A. 1987. Type specimens of Recent mammals in the Utah Museum of Natural History, University of Utah. The Great Basin Naturalist, 47:620-624.
- SANBORN, C. C. 1947. Catalogue of type specimens of mammals in the Chicago Natural History Museum. Fieldiana: Zoology, 32:209-293.
- SCHMIDLY, D. J. and J. K. JONES, Jr. 1984. Holotypes of Recent mammals in Texas natural history collections. Occasional Papers, The Museum, Texas Tech University, 92:1-13.
- YOUNGMAN, P. M. 1972. Type specimens of mammals in the National Museum of Natural Sciences, Ottawa. National Museum of Natural Sciences Publications in Zoology, 7:1-7.

APPENDIX IV

PUBLICATION SERIES ASSOCIATED WITH COLLECTIONS OF MAMMALS

Title of publication	Museum acronym
Acta Biológica Venezuelica	MBUCV
Acta Zoologica Lilloana	CML
American Museum Novitates	AMNH
Anales del Instituto de Biología	UNAM
Andrés Posada Arango	IND-M
Annals of Carnegie Museum	CM
Annals of Iowa	ISNHC
Arquivos do Museu Nacional	MN
Biological Field Station	SUNYO
	UAM
Biological Papers of the University of Alaska Bish on Museum Bulletins in Zoology	
Bishop Museum Bulletins in Zoology	BPBM
Boletín, Museo de Historia Natural, Universidad Nacional de San Agustin	MUSA
Boletín del Museo Nacional Historia Natural	MNHN
Boletín del Museo Nacional Historia Natural del Paraguay	MNHNP
Boletín do Museo de Biologia Mello Leitâo	MBML
Brenesia del Museo Nacional de Costa Rica	MNCR
Brimleyana, Occasional Papers of the North Carolina Biological Survey	NCSM
Bulletin of Carnegie Museum	CM
Bulletin of Chicago Academy of Sciences	CHAS
Bulletin of the American Museum of Natural History	AMNH
Bulletin of the Buffalo Society of Natural Sciences	BSNS
Bulletin of the Dallas Museum of Natural History	DMNH
Bulletin of the University of Nebraska State Museum	UNSM
Caldasia	ICN
Comunicaciones	MFA-ZV-M
Contributions in Science	LACM
Discovery Magazine	YPM
Field Guide Series	NVM
Fieldiana: Zoology	FMNH
Florida Museum Bulletin	UF
Great Basin Naturalist	BYU
Great Basin Naturalist Memoirs	BYU
Illinois Natural History Survey Bulletin	INHS
Knoxjonesia (previously Occasional Papers, The Museum, Texas Tech University)	TTU
Life Sciences Contributions	ROM
Lozania	ICN
Massachusetts Division of Fisheries and Wildlife Research Bulletin	MDFW
Memoirs of the Virginia Museum of Natural History	VMNH
Memoria-Natura	MHNLS
Miscellaneous Publications of the Rocky Mountain Biological Laboratory	RMBL
Miscellaneous Publications, Museum of Natural History, University of Kansas	KU
Miscellaneous Publications of the Museum of Zoology, University of Michigan	UMMZ
Museum Bulletin	SBMNH
Museum Chatter	FRMHS
Museum Notes	UNSM
Museum of Natural History Bulletin	UOMNH
Museum Reports	UWSP
National History Occasional Papers	PMA
Natural History	AMNH
Natural History Contributions	RSM
Natural History Inventory of Colorado	UCM

_ Title of publication	Museum acronym
Natural Science Notes	MP
New Brunswick Museum Monograph Series	NBM
New Brunswick Museum Publications in Natural Science	NBM
Nemouria	DMNH
New York State Museum Bulletin	NYSM
Newsletter	BMNH
Newsletters	FMPC
Noticiero Mensual del Museo Nacional de Historia Natural	MNHN
Occasional Papers of the Bishop Museum	BPBM
Occasional Papers, Museo Argentino de Ciencias Naturales	MACN
Occasional Papers of the Museum of Natural History	KU
Occasional Papers of the Museum of Natural Science	LSUMZ
Occasional Papers of the North Carolina Biological Survey	NCSM
Occasional Papers of the Oklahoma Museum of Natural History	OMNH
Occasional Papers, The Museum of Southwestern Biology	MSB
Occasional Papers, Tulane University Museum of Natural History	TU
Occasional Papers, Utah Museum of Natural History	UMNH
Pacific Discovery Magazine	CAS
Peepers	NVM
Postilla	YPM
Proceedings of San Diego Society of Natural History	SDNHM
Proceedings of the Academy of Natural Sciences of Philadelphia	ANSP
Proceedings of the Denver Museum of Natural History	DMNH
Publicacion Avulsos, Museu Nacional, Rio de Janeiro	MN
Publicacion Ocasional del Museo Nacional de Historia Natural	MNHN
Publications of the Wagner Free Institute of Science	WFIS
Research Reports	MP
Revista Politécnica, serie Biología	EPN
San Bernardino County Museum, Museum Quarterly	SBCM
Special Publications of the Northeastern University Vertebrate Collection	NUVC
Special Publications of Carnegie Museum	CM
Special Publications, The Museum of Southwestern Biology	MSB
Stinapa	CPM
Thomas Jefferson Press	NEMSU
Transactions of the Wagner Free Institute of Science	WFIS
Trianea	IND-M
Tulane Studies in Zoology	TU

APPENDIX V

BASIC CURATORIAL STANDARDS FOR SYSTEMATIC COLLECTIONS OF MAMMALS

(as established by the ASM Systematic Collections Committee and published in the Journal of Mammalogy, 59:911-914, 1978)

- 1. Collections should be administered by non-profit or private institutions unless an individual or profit-making organization is willing to establish a perpetual trust returning a reasonable per-specimen, per-year maintenance cost for the collection.
- 2. A collection must have at least one professional mammalogist who is directly responsible for it.
- 3. Collections must be housed in buildings that provide adequate protection from fire, water, dust, excessive heat or light, and other physical hazards. We recommend that important permanent records (such as catalogues and field notes) be kept in a fireproof or fire retardant safe or its equivalent.
- 4. Specimens must be stored in insect, dust, and light-proof containers.
- 5. Specimens must be periodically inspected and fumigated in accordance with federal regulations which stipulate the kinds of fumigants that can be used for this purpose (Williams et al., Special Publication, Carnegie Museum of Natural History, 4:54-56, 1977).
- 6. Specimens must be prepared in a manner that insures their utility. It is particularly critical that osteological materials be properly prepared. The use of dermestid beetles and their larvae in cleaning small skulls and other osteological materials is strongly recommended, but dermestid colonies should be located so to prevent infestation of the collection proper.
- 7. Specimens must be arranged according to a specific plan that is recorded and, preferably, posted.
- 8. Field notes and ancillary data must be preserved as a part of the permanent record for each specimen.
- 9. Data on specimen labels, in field notes, in the permanent catalogues, and wherever else data are recorded in the collection must be accurate.
- 10. A permanent catalogue of all specimens in the collection must be maintained. The catalogue must include at least the minimal data recommended by the American Society of Mammalogists' Committee on Information Retrieval: catalogue number; genus; species; sex; country, continent, or ocean of capture; state or province of capture; method of preparation; date of capture. Implementation of electronic data-processing techniques to facilitate management of specimens and data is recommended. Also, it is recommended that collections maintain catalogues of individual accessions, in addition to those of individual specimens, to facilitate keeping records of collecting permits, field notes, and other information ancillary to the specimens.
- 11. The collection must be accessible to all qualified users.
- 12. Accessibility to collections by unqualified persons must be restricted. We recommend the formation of separate teaching collections for use in basic courses, and the restriction of catalogued specimens for research purposes.
- 13. Loans with other institutions must be handled in a professional manner. Specimens sent on loan should be properly packaged in accordance with federal regulations (Williams et al., Special Publication, Carnegie Museum of Natural History, 4:62-68, 1977).

- 14. Type specimens must be identified as such, stored in cases marked accordingly, and made accessible to qualified scientists. They should not be sent on loan. Type specimens should be deposited only in institutions wherein the specimens will receive the perpetual care they require.
- 15. Evidence should be furnished that the institution intends to continue support of the collection at least at a level necessary to maintain these standards. Should institutional priorities be changed at some future time, the institution should express a willingness to transfer the collection to another public institution that will insure its perpetual maintenance.
- 16. Acquisition and possession of specimens of mammals must accord with federal and state regulations pertaining thereto. Assurance of adherence to such regulations will be sought when a collection is considered for inclusion on the list of collections that meet minimal standards.
- 17. The status of a collection may be reviewed at any time at the request of the institution or the discretion of the ASM Committee on Systematic Collections. Curators should strive to cooperate in the review process.

APPENDIX VI

MAMMAL COLLECTIONS ACCREDITED BY THE AMERICAN SOCIETY OF MAMMALOGISTS

The collections on this list meet or exceed the basic curatorial standards established by the ASM Systematic Collections Committee (Appendix V). Collections are listed alphabetically by country, then province or state. Date of accreditation (and reaccreditation) are indicated.

	Year of	Province
Collection name and acronym	accreditation	or state
CANADA		
CANADA Provincial Museum of Alberta (DMA)	1005	A 11a a m4 a
Provincial Museum of Alberta (PMA)	1985	Alberta
University of Alberta, Museum of Zoology (UAMZ)	1985	Alberta
Royal British Columbia Museum (RBCM)	1976	British
Columbia	40==	
University of British Columbia, Cowan Vertebrate Museum (UBC)	1975	British
Columbia	10== 100=	
Canadian Museum of Nature (CMN)	1975, 1987	Ontario
Royal Ontario Museum (ROM)	1975, 1995	Ontario
MEXICO		
Universidad Nacional Autónoma de México, Instituto de		
Biología (IBUNAM)	1975, 1983	Distrito
Federal	1775, 1705	Distrito
1 cuciui		
UNITED STATES		
University of Alaska Museum (UAM)	1975, 1983	Alaska
University of Arizona, Collection of Mammals (UA) 1975, 1982	Arizona	
Arkansas State University, Collection of Recent Mammals (ASUMZ)	1976	Arkansas
University of Arkansas at Little Rock (UALRVC) 1977	Arkansas	
California Academy of Sciences (CAS)	1975	California
California State University, Long Beach (CSULB) 1979, 1980	California	
Humboldt State University (HSU)	1984	California
Natural History Museum of Los Angeles County (LACM)	1978	California
San Diego Natural History Museum (SDNHM)	1975	California
Santa Barbara Museum of Natural History (SBMNH) 1986	California	
University of California, Berkeley, Museum of Vertebrate Zoology (MVZ)	1975	California
University of California, Santa Barbara (UCSB)	1986	California
Denver Museum of Natural History (DMNH)	1989	Colorado
University of Colorado Museum (UCM)	1975	Colorado
University of Connecticut, Mammal Research Collection (UCONN)	1975, 1983	Connecticut
United States National Museum of Natural History (USNM)	1975, 1977, 1979	D. C.
University of Florida, Florida Museum of Natural History (FSM)	1975, 1983	Florida
University of Georgia, Museum of Natural History (UGAMNH)	1985	Georgia
Bernice P. Bishop Museum (BPBM)	1975, 1986	Hawaii
Chicago Academy of Science (CHAS)	1989	Illinois
Field Museum (FMNH)	1975, 1983	Illinois
University of Illinois, Museum of Natural History (UIMNH)	1975, 1985	Illinois
Fort Hays State University, Sternberg Museum (MHP)	1975, 1980	Kansas
University of Kansas, Museum of Natural History (KU)	1975, 1987	Kansas
Louisiana State University, Museum of Natural Science (LSUMZ)	1975, 1989	Louisiana
Harvard University, Museum of Comparative Zoology (MCZ)	1975	Massachusetts
Michigan State University Museum (MSU)	1975, 1985	Michigan
University of Michigan, Museum of Zoology (UMMZ) 1975, 1987	Michigan	8.
University of Minnesota, Bell Museum of Natural History (MMNH)	1975	Minnesota
University of Montana, Zoological Museum (UMZM) 1975, 1985	Montana	
University of Nebraska State Museum (UNSM)	1975	Nebraska
New Mexico Museum of Natural History (NMMNH) 1994	New Mexic	
New Mexico State University, Department of Biology (NMSU)	1977	New Mexico
University of New Mexico, Museum of Southwestern Biology (MSB)	1975, 1984, 1987	
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	Year of	Province
Collection name and acronym	accreditation	or state
American Museum of Natural History (AMNH)	1975, 1978	New York
American Museum of Natural History (AMNH) Cornell University, Vertebrate Collections (CUVC) 1975	New York	New TOIK
• /		Marry Wards
New York State Museum (NYSM)	1975	New York
Cleveland Museum of Natural History (CMNH)	1994	Ohio
University of Oklahoma, Oklahoma Museum of Natural	1075 1000	011.1
History (OMNH)	1975, 1982	Oklahoma
Oregon State University (OSUFW)	1975, 1979	Oregon
Carnegie Museum of Natural History (CM)	1975, 1984	Pennsylvania
Shippensburg University, Vertebrate Museum (SUVM)	1977, 1987	Pennsylvania
Clemson University, Vertebrate Collections (CUSC)	1986	South Carolina
University of Memphis (UM)	1976	Tennesee
Angelo State University, Natural History Collection (ASNHC)	1992	Texas
Dallas Museum of Natural History (DMNH)	1980	Texas
Midwestern State University (MWSU)	1975, 1988	Texas
The Museum of Texas Tech University (TTU)	1975, 1983	Texas
Texas A&M University, Texas Cooperative Wildlife Collection (TCWC)	1975, 1984	Texas
University of Texas at El Paso, Centennial Museum (UTEP)	1977	Texas
University of Texas at Austin, Texas Natural History Collection (TNHC)	1976	Texas
Brigham Young University, Monte L. Bean Life Science Museum (BYU)	1991	Utah
University of Utah, Utah Museum of Natural History (UMNH)	1975, 1993	Utah
University of Puget Sound, James R. Slater Museum of		
Natural History (PSM)	1975	Washington
University of Washington, Thomas Burke Memorial Washington		C
State Museum (UWBM)	1975	Washington
Washington State University, Charles R. Conner Museum (CRCM)	1977	Washington
University of Wisconsin, Stevens Point (UWSP)	1994 (provisional)	Wisconsin
University of Wisconsin, Zoological Museum (UWZM) 1975, 1983	Wisconsin	5 🗸 🗸

APPENDIX VII

ALPHABETICAL INDEX OF COLLECTION ACRONYMS

Asterisks denote acronyms assigned (or modified) by the authors, and daggers denote duplicated acronyms.

Acronym	Collection name	Page
ACTC	Austin College	63
ACUNHC	Abilene Christian University, Natural History Collection	63
AFGMC	Alaska Department of Fish and Game	29
AMNH	American Museum of Natural History	54
ANSP	Academy of Natural Sciences of Philadelphia	60
APM	Algonquin Park Museum	21
ASCC	Adams State College Collection	36
ASNHC	Angelo State Natural History Collection	63
ASUMC	Arizona State University, Mammal Collection	30
ASUMZ	Arkansas State University, Collection of Recent Mammals	31
AUM	Auburn University Museum	29
AUW	Acadia University, Wildlife Museum	21
BCM	Brooklyn Children's Museum	54
BCNP	Bryce Canyon National Park	67
BMNHC	Burpee Museum of Natural History	40
BNP	Banff Park Museum	19
BPBM	Bernice P. Bishop Museum	39
BSCVC	Bemidji State University, Vertebrate Collections	49
BSNS	Buffalo Society of Natural Sciences	55
BSUMC	Ball State University, Mammal Collection	42
BUTC	Boston University	47
BVC	Buena Vista College	42
BYU	Brigham Young University, Monte L. Bean Life Science Museum	67
CACA	Carlsbad Caverns National Park	53
CAS	California Academy of Sciences	32
CBF	Colección Boliviana de Fauna	18
CBNM	Cedar Breaks National Monument	67
CCNH	Central Michigan University, Center for Cultural and Natural History	48
CCVC	Centenary College, Vertebrate Collection	45
CCW	Casper College	71
CERL/BIC	United States Army, Biological Inventory Collection	41
CHAS	Chicago Academy of Sciences	40
CHM	Charleston Museum	61
CIB	Centro de Investigaciones Biológicas del Noroeste (Mexico)	26
CIMNH	Albertson College of Idaho, Orma J. Smith Museum of Natural History	39
CIS	Cranbrook Institute of Science	48
CLNP	Crater Lake National Park Museum Collection	59
CM	Carnegie Museum of Natural History	60
CM-IEA	Universidad Autónoma de Tamaulipas (Mexico)	27
CM-MVUP	Universidad de Panama, Museo de Vertebrados	28
CM-UMSNH	Universidad de Michoacán (Mexico)	27
CMCNA	Museo de Ciencias Naturales y Antropológicas "Prof. A. Serrano"	17
CML	Universidad Nacional de Tucumán, Colección de Mamíferos Lillo (Argentina)	18
CMN	Canadian Museum of Nature	21

CSCS California State University, Turlock CSPUP California State University, Pomona CSPUP California State University, Pomona CSUC California State University, Fresno CSUF California State University, Fresno CSULB California State University, Long Beach SCULB California State University, Northridge CSUN California State University, Northridge CSUN California State University, Morthridge CSUN California State University, Morthridge CSUTC Colorado State University, Marmalogy Teaching Collection GCUT Central College CUMZ [†] Cameron University, Museum of Zoology CUMZ [†] Carleton University, Museum of Zoology CUMZ [†] Carleton University, Wuseum of Zoology CUNRC Universidad Nacional de Rio Cuarto, Colección de Mamíferos (Argentina) I88 CUSC Clemson University, Vertebrate Collections CUVC Cornell University, Vertebrate Collections 55 CVUL Universidad de Los Andes (Venezuela) CZUP Universidad de Los Andes (Venezuela) CZIP Universidad de Magallanes, Instituto de la Patagonia (Chile) 24 CZUAA Universidad de Magallanes, Instituto de la Patagonia (Chile) 25 CZUA Death Valley National Park DINO Dinosaur National Monument 37 DIX Dixie College, Natural History Museum MNH [†] Delaware Museum of Natural History 38 DMNH [†] Delaware Museum of Natural History 39 DMNH [†] Delaware Museum of Natural History 39 DMNH [†] Delaware Museum of Natural History 30 DMNH [†] Delaware Museum of Natural History 30 DMNH Denver Museum of Natural History 31 DMNH Dinosaur National History 32 DMNH Dinosaur National History 34 DMNH Dinosaur National History 36 DMNH Denver Museum of Natural History 37 DMSP Davis Mountains State Park 38 DMNH Denver Museum of Natural History 39 DMNH Denver Museum of Natural History 30 DMNH Denver Museu	Acronym	Collection name	Page
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Acronym	Collection name	Page
FLC	Faut Lauria Callean	27
FLC	Fort Lewis College	37
FMNH	The Field Museum	40
FMPC	Fairbanks Museum and Planetarium Collection	68
FRM	Friends University, Fellow-Reeve Museum of History and Science	44
FSUM	Florida State University Museum	39
FSUMC	Frostburg State University, Mammal Collection	46
FWMSH	Fort Worth Museum of Science & History	64
GBNM	Glacier Bay National Park and Preserve Museum	30
GLAC	Glacier National Park, Glacier Collection	51
GML	Gaylord Memorial Laboratory Museum	50
GRCAMC	Grand Canyon National Park Museum Collection	30
GRPM	Public Museum of Grand Rapids	49
GRSM	Great Smoky Mountains National Park	62
GSDNM	Great Sand Dunes National Monument	37
GTNP	Grand Teton National Park	72
HBC	Henry Brockhouse Collection	62
HCCV	Hastings College, Collection of Vertebrates	51
HCMZ	Hope College	48
HCNHSC	Ohio Historical Society, Natural History Synoptic Collection	57
HM	Hastings Museum	52
HNHR	University of California, Hastings Natural History Reservation	35
HSU	Humboldt State University	33
HSUCV	Hardin-Simmons University, Collection of Vertebrates	64
HSUMZ	Henderson State University, Museum of Zoology	31
IADIZA-CM	Instituto Argentino de Investigaciónes de las Zonas Aridas	17
IBUNAM	Universidad Nacional Autónoma de México, Instituto de Biología	28
ICN	Instituto de Ciencias Naturales, Museo de Historia Natural (Colombia)	24
IEEUACH	Universidad Austral de Chile, Instituto de Ecología y Evolución	23
IFGD	Idaho Fish and Game	40
IIBUV	Investigaciones Biológicas de la Universidad Veracruzana (Mexico)	26
IND-M	La Unidad de Investigación "Federico Medem"-Inderena (Colombia)	24
INC*	Instituto Nacional de Cultura, Museo de Ciencias Naturales (Panama)	28
INHS	Illinois Natural History Survey	40
IOWA	University of Iowa, Museum of Natural History	43
ISM	Illinois State Museum	41
ISNHC	State Historical Society of Iowa	43
ISU	Illinois State University	41
ISUVC	Indiana State University	42
JMM	Earlham College, Joseph Moore Museum	42
JSHC	Jay S. Haft Collection	71
KM	Kelowna Museum	20
KSU	Kansas State University	44
KU	University of Kansas, Museum of Natural History	44
LACM	Natural History Museum of Los Angeles County	33
LAME	Lake Mead National Recreation Area	52
LAVO	Lassen Volcanic National Park	33
LCM	Universidad de Chile, Laboratorio de Citogenética de Mamíferos	23
LSSC		48
LOSC	Lake Superior State College	48

Acronym	Collection name	_ Page
LSUMZ	Louisiana State University, Museum of Natural Science	45
LTU	Louisiana Tech University	45
MACN	Museo Argentino de Ciencias Naturales "Bernandino Rivadavia"	17
MBM	San Jose State University, Museum of Birds and Mammals	35
MBML	Museu de Biologia Mello Leitão (Brazil)	18
MBUCV	Universidad Central de Venezuela	72
MCN	Museu de Ciências Naturais (Brazil)	19
MCZ	Harvard University, Museum of Comparative Zoology	47
MDFW	Massachusetts Division of Fisheries and Wildlife	47
MECN	Museo Ecuatoriano de Ciencias Naturales (Ecuador)	25
MFA-ZV-M	Museo Florentino Ameghino, Colección de Mastozoología (Argentina)	17
MHNC	Museo de Historia Natural de Concepción (Chile)	23
MHNCI	Museu de Historia Natural "Capão de Imbuia" (Brazil)	19
MHNES*	Museo de Historia Natural de El Salvador	25
MHNLS	Colección de Mastozoología (Venezuela)	72
MHNV	Museo de Historia Natural de Valparaiso (Chile)	23
MHP	Fort Hays State University, Sternberg Museum of Natural History	43
MJCM	Museo de Ciencias Naturales y Antropológicas "Prof. Juan C.	73
IVIJCIVI	Moyano" (Argentina)	17
MLP	Museo de La Plata (Argentina)	17
MLZ	Occidental College, Moore Laboratory of Zoology	34
MMMN	Manitoba Museum of Man and Nature	20
MMNH		50
MMNS	University of Minnesota, James Ford Bell Museum of Natural History Mississippi Museum of Natural Science	50
MMP	Museo de Mar del Plata (Argentina)	17
MMS	Montshire Museum of Science	69
MN		
	Universidade Federal do Rio de Janeiro, Museu Nacional (Brazil) Museum of Northern Arizona	19 30
MNA MNCD		
MNCR	Museo Nacional de Costa Rica	24
MNHN	Museo Nacional de Historia Natural (Chile)	23
MNHNP	Museo Nacional de Historia Natural del Paraguay	28
MNK	Museo de Historia Natural "Noel kempff Mercado" (Bolivia)	18
MNR	Ministry of Natural Resources	22
MP	Mohonk Preserve, Inc.	55
MPC	Monterey Peninsula College, Life Science Museum	33
MSB	University of New Mexico, Museum of Southwestern Biology	54
MSU	Michigan State University Museum	49
MSUB	Montana State University	51
MSUMC	Murray State University	45
MSUZ	Mississippi State University, Zoological Collections	50
MU	Miami University	57
MUGM	Museo de Ciencias Naturales, Colección "Gustavo Orcés" (Ecuador)	25
MUMZ	University of Missouri, Museum of Zoology	51
MUSA	Universidad Nacional de San Agustin, Museo de Historia Natural (Peru)	28
MUSM	Universidad Nacional de San Marcos, Museo de Historia Natural (Peru)	29
MVZ	University of California, Berkeley, Museum of Vertebrate Zoology	35
MWFB	University of California, Davis, Museum of Wildlife and Fisheries Biology	35
MWSU	Midwestern State University	64
MZ-ICACH	Instituto de Ciencias y Artes de Chiapas, Museo Zoológico (Mexico)	26

Acronym	Collection name	Page
MZUC	Universidad de Concepción, Museo de Zoología (Chile)	23
MZUCR	Universidad de Costa Rica, Museo de Zoología	24
MZUSP	Universidade de Sao Paul, Museu de Zoologia (Brazil)	19
NAUVM	Northern Arizona University, Museum of Vertebrates	30
NBM	New Brunswick Museum	21
NBNM	National Park Service	68
NCS	North Carolina State University	56
NCSM	North Carolina State Museum of Natural Sciences	56
NDSU	North Dakota State University	56
NEMSU	Truman State University	51
NLU	Northeast Louisiana University, Museum of Zoology	46
NMED	New Mexico Environment Department	53
NMML	National Marine Mammal Laboratory	70
NMMNH	New Mexico Museum of Natural History	53
NMSU	New Mexico State University	54
NPSC	Northern Prairie Science Center	56
NRWC	N. R. Whitney Collection	62
NSM	Nova Scotia Museum of Natural History	21
NSMC	Nevada State Museum	52
NSMHS	Nevada State Museum and Historical Society	52
NSU	Northeastern State University, Biological Collections	58
NSUL	Northwestern State University of Louisiana	46
NUVC	Northeastern University, Vertebrate Collection	47
NWC	University of Northern Iowa, Nixon Wilson Collection	43
NWMSU	Northwest Missouri State University	50
NYSM	New York State Museum	55
NZCS	National Zoological Collection of Suriname	29
OAXM	Centro Interdisciplinario de Estudios, Colección Mastozoológica (Mexico)	25
OMNH	University of Oklahoma, Oklahoma Museum of Natural History	58
ONP	Olympic National Park	70
OSU	Oklahoma State University, Collection of Vertebrates	58
OSUFW	Oregon State University, Department of Fisheries and Wildlife Mammal	
	Collection	59
OSUMZ	Ohio State University, Museum of Biological Diversity	57
OUVC	Ohio University, Vertebrate Collection	57
PAUMC	Pan American University, Mammal Collection	64
PECA	Pratt Education Center and Aquarium	44
PFSS	Petrified Forest National Park	31
PGMNH	Pacific Grove Museum of Natural History	34
PM^{\dagger}	Pratt Museum	30
PM^{\dagger}	Putnam Museum of History and Natural Science	43
PMA	Provincial Museum of Alberta	19
PMNH	Amherst College, Pratt Museum of Natural History	47
PMS	Peabody Essex Museum	47
PMSD	Pettigrew Museum	62
PNICMM-INP	Instituto Nacional de la Pesca (Mexico)	26
PORE	Point Reyes National Seashore	34
PPHM	Panhandle-Plains Historical Museum	64
PRICO	University of Puerto Rico	61
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PSM University of Puger Sound, James R. Slater Museum of Natural History Pennsylvania State University 600 PSUI Pennsylvania State University 59 PSUMC Pittsburg State University 44 PUCMNH Pacific University 44 PUCMNH Pacific University 44 PUCMNH Pacific University 45 PWRC Patuxent Wildlife Research Center 47 QCAZ Pontifica Universidad Catolica del Ecuador, Museo de Zoología-Mamíferos 25 RBCM Royal British Columbia Museum 61 RBCM Royal British Columbia Museum 62 RCMC Rockford College 41 RM McGill University, Redpath Museum 22 RMBL Rocky Mountain Biological Laboratory 37 RMNP Riding Mountain National Park 20 ROMO Rocky Mountain National Park 20 ROMO Rocky Mountain National Park 37 RPM Reading Palblic Museum 22 ROMO Rocky Mountain National Park 37 RPM Reading Palblic Museum 40 RPPMC Rondeau Provincial Park 22 RVP Museo Provincial del Historia Natural de La Pampa (Argentina) 18 RWC State University New York, Roosevelt Wildlife Collection 55 RWPM Roger Williams Park Museum 61 RBCM San Bernardino County Museum 34 SBMNH Sonth Barbar Museum 61 SBCM San Bernardino County Museum 34 SBNNH Sonth Barbar Museum 61 SBCM San Bernardino County Museum 34 SDAKS South Dakota State University 32 SCNHM Southwestern College, Natural History 35 SCNHM Southwestern College, Natural History Museum 34 SDAKS South Dakota State University 34 SDAKS Southeastern Louisana University, Edwardsville 34 SDAKS Southen Illinois University, Edwardsville 34 SDAKS Southen Illinois University, Edwardsville 34 SDAKS Southen Illinois University, Edwardsville 34 SDAKS Southens Illinois University, Edwardsville 34 SDAKS Southens Illinois University, Selmaith Museum of Natural History 42 SHSND Southeastern Louisana University, Vertebrate Natural History 43 SDAM Southeastern Louisana Univers	Acronym	Collection name	Page
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TCNM Timpanogos Cave National Monument 68			
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	TCWC	Texas A&M University, Texas Cooperative Wildlife Collection	65

Acronym	Collection name	_ Page
TMM	University of Texas at Austin, Vertebrate Paleontology Lab	66
TNHC	University of Texas at Austin, Texas Natural History Collection	66
TNSC	Trailside Nature and Science Center	53
TSC	Tarleton State University, Tarleton State Collection	65
TSSMC	Teton Science School	72
TTU	Texas Tech University, Museum of Texas Tech University	65
TU	Tulane University, Museum of Natural History	46
TWC	Texas Wesleyan College, Museum of Zoology	65
TWRA	Tennessee Wildlife Resources Agency	63
UA	University of Arizona, Collection of Mammals	31
UABCS	Universidad Nacional Autónoma de Baja California Sur (Mexico)	27
UALRVC	University of Arkansas at Little Rock, Vertebrate Collection	31
UAM	University of Alaska Museum	30
UAMI	Universidad Autónoma Metropolitana, Unidad Iztapalapa (Mexico)	27
UAMZ	University of Alberta, Museum of Zoology	20
UAMZC	University of Arkansas, Museum Zoological Collections	31
UAY*	Universidad Autónoma de Yucatán, Facultad de Medicina Veterinaria	
	y Zootecnia	27
UBC	University of British Columbia, Cowan Vertebrate Museum	20
UCLA	University of California, Los Angeles, Dickey Collection	36
UCM	University of Colorado Museum	37
UCOCV	University of Central Oklahoma, Collection of Vertebrates	58
UCONN	University of Connecticut	38
UCSB	University of California, Santa Barbara, Santa Barbara Vertebrate Museum	36
UDEL	University of Delaware	38
UF	University of Florida, Florida Museum of Natural History	39
UFHNH	Utah Field House of Natural History State Park	68
UGAMNH	University of Georgia, Museum of Natural History	39
UGDZ	University of Guelph	22
UIDA	University of Idaho, Bird and Mammal Museum	40
UIMNH	University of Illinois, Museum of Natural History	41
UKEN	University of Kentucky	45
UM	University of Memphis, Mammal Collection	63
UMA	University of Massachusetts, Museum of Zoology	48
UMAN	University of Manitoba, Zoological Collection	20
UMD	University of Minnesota, Duluth	50
UMF	University of Maine, Farmington	46
UMHB	University of Mary Hardin-Baylor	66
UMMZ	University of Michigan, Museum of Zoology	49
UMNH	University of Utah, Utah Museum of Natural History	68
UMO	University of Maine	46
UMZM	University of Montana, Zoological Museum	51
UNC-B*	University of Northern Colorado	37
UNCW	University of North Carolina at Wilmington	56
UND	University of North Dakota, Vertebrate Museum	57
UNEVR	University of Nevada, Museum of Biology	53
UNH	University of New Hampshire	53
UNI	University of Northern Iowa	43
UNO	University of Nebraska at Omaha	52
UNSM	University of Nebraska State Museum	52
UOMNH	University of Oregon, Museum of Natural History	59

Acronym	Collection name	Page
URIMC	University of Phode Island, Mammel Collection	61
USANHC	University of Rhode Island, Mammal Collection University of South Alabama, Vertebrate Natural History Collection	29
USD	University of South Dakota University of South Dakota	62
USDAK	W. H. Over State Museum	62
USI	University of Southern Indiana	42
USNM	United States National Museum of Natural History	38
USRC	University of Regina	23
UTA	University of Texas at Arlington	66
UTEP	University of Texas at El Paso, Centennial Museum	66
UTLPA	University of Texas at Austin, Laboratory of Physical Anthropology	66
UTMZ	University of Tennessee, Museum of Zoology	63
UV	Universidad del Valle, Colección de Mamíferos (Colombia)	24
UWBM	University of Washington, Thomas Burke Memorial Washington State	
C // 21/1	Museum	70
UWI*	University of the West Indies (Trinidad and Tobago)	29
UWMA	University of Wisconsin, Milwaukee, Department of Anthropology	71
UWMIL	University of Wisconsin, Milwaukee, Department of Biological Sciences	71
UWSP	University of Wisconsin, Stevens Point, Museum of Natural History	71
UWZM	University of Wisconsin, Zoological Museum	71
VCU	Virginia Commonwealth University	69
VFWD	Vermont Fish and Wildlife Department	69
VMKSC	Kearney State University, Vertebrate Museum	52
VMNH	Virginia Museum of Natural History	69
VPIMM	Virginia Polytechnic University, Mammal Museum	69
VSC-L	Lyndon State College, Mammal Collection	69
WACA	Walnut Canyon National Monument	31
WCW	Whitman College	70
WFIS	Wagner Free Institute of Science	61
WFUVC	Wake Forest University, Vertebrate Collection	56
WGD	Washington Game Department	70
WICA	Wind Cave National Park	62
WIU	Western Illinois University, Museum of Natural History	41
WKSU	Western Kentucky State University	45
WMM	Witte Memorial Museum	67
WNHM	Oklahoma Baptist University, Webster Natural History Museum	58
WNMU	Western New Mexico University	54
WPMM	State Museum of Pennsylvania	60
WSBC	Wichita State University	44
WSC	Westfield State College, Museum and Herbarium	48
WSNM	White Sands National Monument	54
WSU	Weber State University, Bird and Mammal Collection	68
WSUMNH	Wayne State University, Museum of Natural History	49
WTSU	West Texas A&M University, Natural History Collection	67
WU	Wayland University	66
WUME	Willamette University	59
WVMS	Marshall University, West Virginia Mammal Survey	71
WWF	Welder Wildlife Foundation	67
WWM	Werner Wildlife Museum	72
YNP	The Yosemite Museum	36
YPM	Yale University, Peabody Museum of Natural History	38
ZNP	Zion National Park	68
ZTNH	University of Vermont, Zadock Thompson Natural History Collections	69