

CURATORIAL METHODS

NATURAL HISTORY COLLECTIONS C. SCHONEWALD-COX

- I. PRINCIPLES FOR DEVELOPMENT AND CARE OF MUSEUM COLLECTIONS
REMAIN PRETTY MUCH THE SAME THROUGHOUT.

- I. VALUE OF COLLECTIONS

BY DEFINITION SOMETHING IS SET ASIDE IN A MUSEUM COLLECTION BECAUSE OF ITS VALUE. THIS MAY BE CURIOSITY, AESTHETIC OR RESEARCH AND DOCUMENTARY MATERIALS,

2. CURATORIAL RESPONSIBILITIES

THESE INCLUDE MAINTAINING ORDER IN THE COLLECTION, MAINTAINING RECORDS, PREVENTING DECAY AND DETERIORATION OF SPECIMENS AS MUCH AS IS POSSIBLE,

3. PLANNING COLLECTIONS (SCOPE OF COLLECTIONS)

THIS INCLUDES DETERMINING THE BASIC FEATURES OF THE PARK WHICH NEED REPRESENTATION IN THE COLLECTION, DETERMINING THE PROBABLE USE OF THE COLLECTION. THIS SHOULD BE CONSISTENT WITH THE OBJECTIVES OF THE PARK.

4. REFERENCE WORK

THIS ENTAILS DETERMINING INFORMATION AND LIBRARY FACILITIES WHICH ARE NEEDED AND WHICH ARE AVAILABLE TO HELP PROPERLY MAINTAIN OR INTERPRET SPECIMENS, IT IS ALSO IMPORTANT TO ATTEMPT TO DETERMINE THE PROBABLE RESEARCH POTENTIAL OF SPECIMENS IN THE COLLECTION.

5. STORAGE

STORAGE INCLUDES PROVIDING ADEQUATE FACILITIES WITH TEMPERATURE AND IF NECESSARY, HUMIDITY CONTROL FACILITIES; ALSO TO PROTECT SPECIMENS FROM MOLD AND INFESTATIONS.

6. FUNDING

PRIORITIES NEED TO BE ESTABLISHED TO DETERMINE WHICH SPECIMENS ARE MORE CRITICALLY IN NEED OF CARE OR RESTORATION. PRIORITIES SHOULD BE ESTABLISHED FOR THE CARE OF WHAT IS ALREADY IN THE COLLECTION BEFORE FUNDS ARE SET ASIDE FOR EXPANSION, THE TOP-OF-THE-LIST EXPENSES SHOULD BE CARE AND STORAGE FOR THE INCOMING SPECIMENS.

7. SECURITY

MONITOR USE OF AND ACCESS TO RESEARCH COLLECTIONS AND
OTHER VALUABLE SPECIMENS,

8. RECORDS

MAINTAIN A CATALOG, FILES AND RECORDS PERTAINING TO USE,
ACCESSIONS AND LOANS,

9. CONSERVATOR ACTIVITIES

IT IS IMPORTANT TO MAKE USE OF RESTORATION AND CONSER-
VATION FACILITIES AT HARPERS FERRY AND LOCAL MUSEUMS,

10. HANDLING AND PACKAGING

ONE SHOULD TREAT SPECIMENS AS ONE WOULD FRAGILE CRYSTAL, MINIMIZE FINGER CONTACT TO ORGANIC SURFACES, MINERALS, ROCKS, OR FOSSILS. MINIMIZE STRESS BY CROWDING, PRESSURE OR EXTREME TEMPERATURE, AND HUMIDITY FLUCTUATIONS.

II. WHAT IS DISTINCTIVE ABOUT NATURAL HISTORY COLLECTIONS?

1. COMPOSITION

NATURAL HISTORY COLLECTIONS COMPRISE BIOLOGICAL, FOSSIL AND GEOLOGICAL MATERIALS (OUTSIDE NPS USAGE THE TERM "NATURAL HISTORY" MOST OFTEN REFERS TO THE BIOLOGICAL REALM AND DOES NOT NECESSARILY INCLUDE GEOLOGY), THESE INCLUDE TWO BASIC TYPES OF MATERIALS: ORGANIC AND INORGANIC.

ORGANIC

ANIMALS
PLANTS

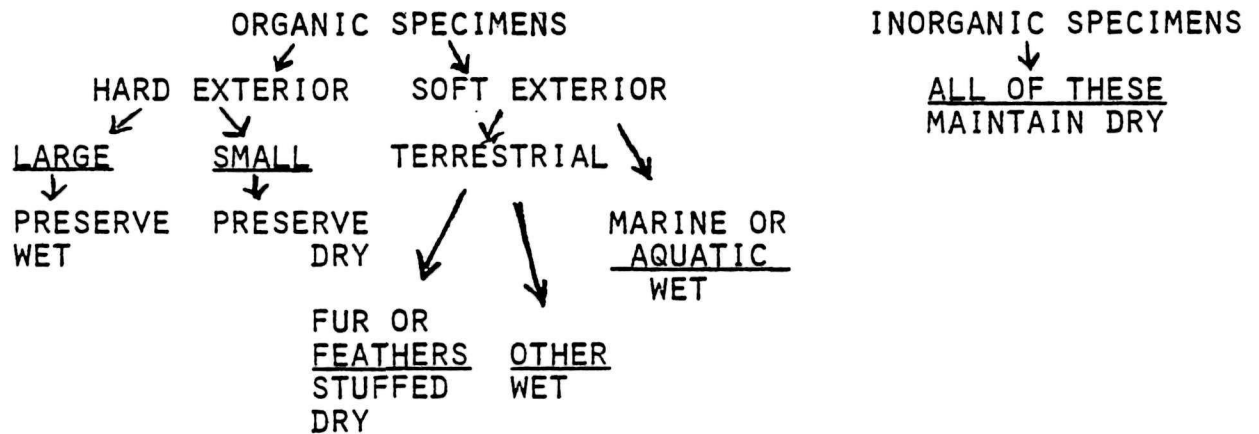
INORGANIC

ANIMAL SHELLS AND BONES
ROCKS AND MINERALS

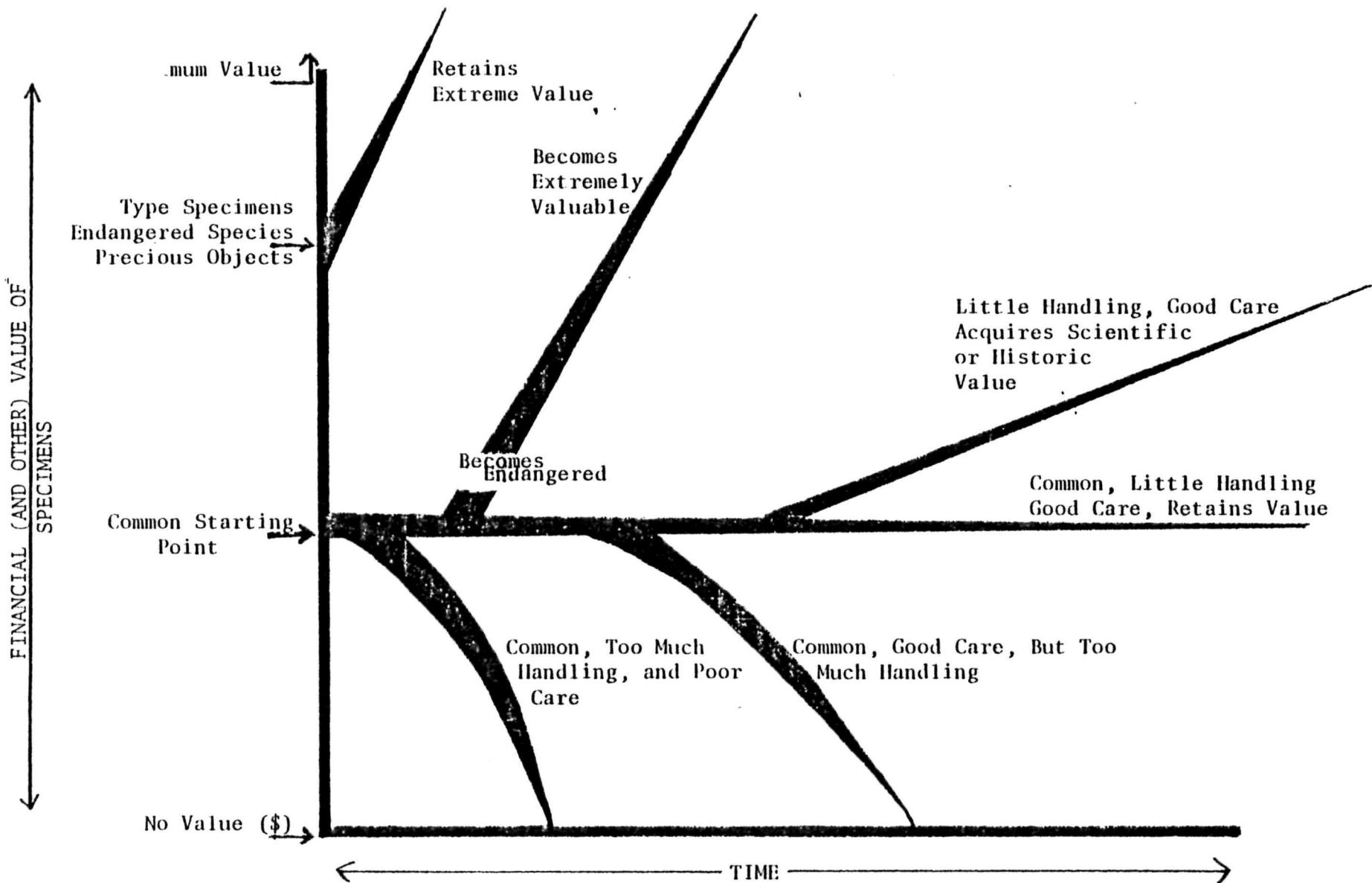
THE COMPOSITION OF THESE MATERIALS DETERMINES THEIR MODE OF PRESERVATION AND THE TYPE OF CARE THEY MUST RECEIVE,

2. PRESERVATION

THE MATERIAL MAKING UP THE SPECIMEN DETERMINES THEIR SUSCEPTIBILITY TO DETERIORATION AND THE GENERALIZED CARE THEY REQUIRE, THE BIOLOGICAL CHARACTERISTICS OF ONCE LIVING SPECIMENS DETERMINES THE SPECIFICS OF THE CARE, EACH GROUP HAS ITS PECULIAR CHARACTERISTICS FOR FIXING, PRESERVATION AND STORAGE.

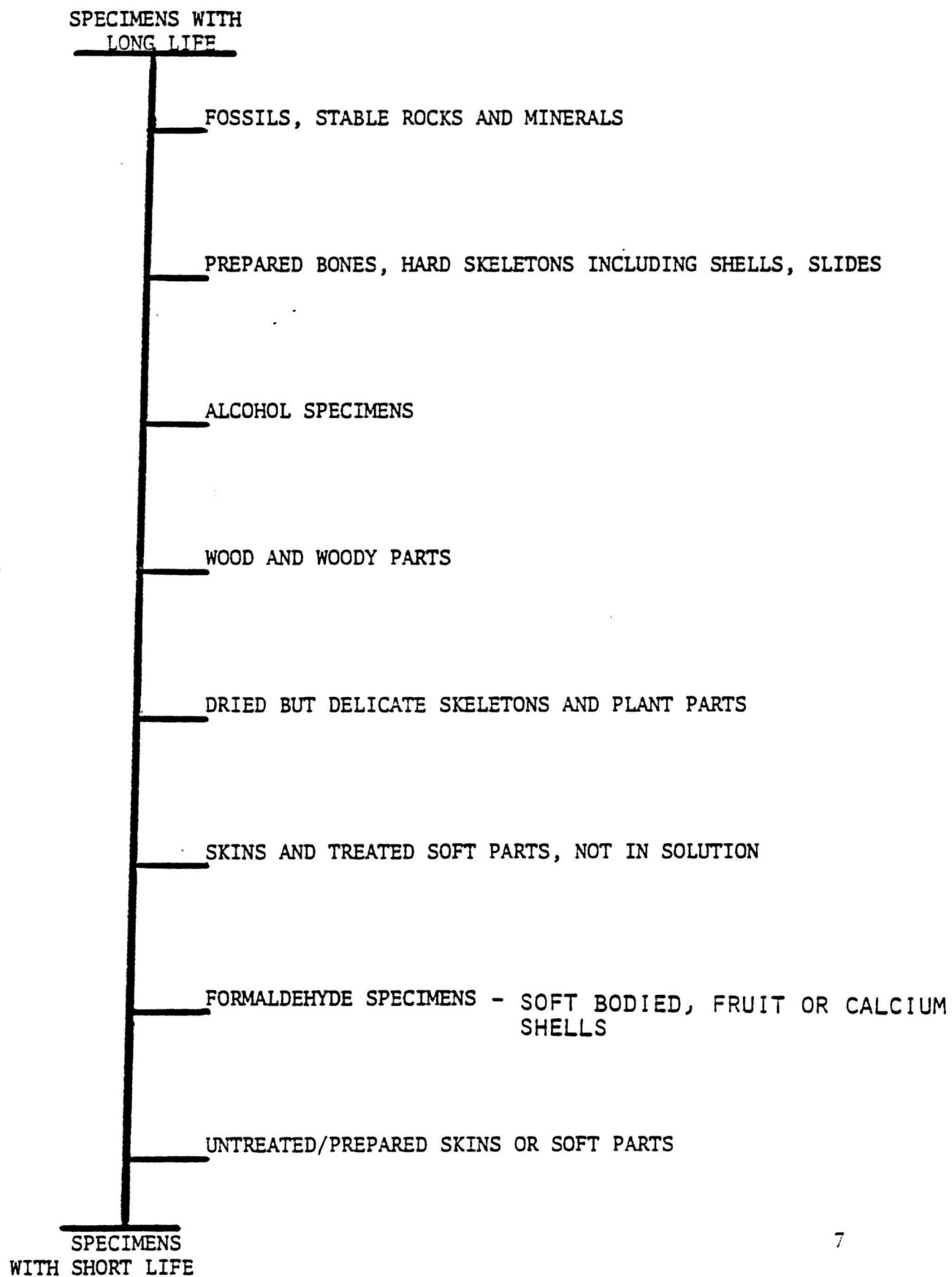


PRESERVATION IS DEPENDENT ON ADEQUATE CURATION



INFLUENCE OF TIME, HANDLING AND QUALITY OF CARE ON THE DETERIORATION OF
NATIONAL PARK SERVICE NATURAL HISTORY SPECIMENS

A GENERALIZED COMPARISON OF THE MUSEUM LIFE OF SPECIFIC TYPES
OF SPECIMENS



3. STORAGE AND ARRANGEMENT

IN ALL CASES AVOID CROWDING OF SPECIMENS, MINIMIZE HANDLING OF RESEARCH (=STUDY) SPECIMENS. SPATIALLY, SPECIMENS ARE ARRANGED ACCORDING TO NATURAL-EVOLUTIONARY BIOLOGICAL RELATIONSHIPS (SYSTEMATICS) REFLECTED IN THEIR TAXONOMY (THE DEFINITION OF RELATIONSHIPS INTO A CLASSIFICATION SYSTEM),

KINGDOM
PHYLUM
CLASS
ORDER
FAMILY
GENUS
SPECIES

GEOLOGICAL SPECIMENS ARE ARRANGED ACCORDING TO THEIR NATURAL CHEMICAL RELATIONSHIPS. FOSSIL SPECIMENS ARE ARRANGED ACCORDING TO THEIR TAXONOMY AND GEOLOGIC PERIOD OF EXISTENCE,

4. USES AND DISPOSAL

NATURAL HISTORY COLLECTIONS CAN BE USED FOR THREE FAIRLY DISTINCT PURPOSES: FOR 1) DISPLAY, 2) INTERPRETATION OR REFERENCE OR 3) RESEARCH OR STUDY. DISPLAY COLLECTIONS ARE USED FOR EXHIBIT, INTERPRETIVE COLLECTIONS ARE USED FOR REFERENCE BY GENERAL PARK STAFF, USED IN INTERPRETATION WITH PARK VISITORS OR FOR OTHER TEACHING PURPOSES, STUDY OR RESEARCH COLLECTIONS ARE USED EXCLUSIVELY FOR SCIENTIFIC INVESTIGATION AND SHOULD HAVE VERY LIMITED ACCESS, WHILE SPECIMENS CAN BE REMOVED FROM AN INTERPRETIVE COLLECTION FOR USE IN DISPLAY, THEY SHOULD NOT GENERALLY BE TAKEN FROM A RESEARCH OR STUDY COLLECTION FOR DISPLAY, SPECIMENS SUBJECT TO THE MOST HANDLING ARE PROBABLY DISPLAY AND INTERPRETIVE SPECIMENS, SPECIMENS HANDLED FREQUENTLY ARE LIKELY TO DETERIORATE, AND AT SOME POINT WHEN THEY ARE IN BAD SHAPE AND CAN BE REPLACED, THEY CAN BE DISPOSED OF, THIS IS NOT THE CASE FOR RESEARCH SPECIMENS, THESE SHOULD NOT BE DISPOSED OF WITHOUT CONSULTING HARPERS FERRY OR WASO OR WITHOUT OFFERING THEM FIRST TO A LOCAL MUSEUM, RESEARCH SPECIMENS ARE NOT ONLY PRODUCTS OF INDIVIDUALS' PROJECTS BUT ARE PERMANENT DOCUMENTATION OF THE CONDITION AND HEALTH OF THE SPECIES POPULATION AND HABITAT AT A PRECISE TIME, THEY ALSO SERVE AS THE PERMANENT DOCUMENTATION OF THE CONDITION AND HEALTH OF THE SPECIES POPULATION AND HABITAT AT A PRECISE TIME, THEY ALSO SERVE AS THE PERMANENT VALIDATION FOR CLAIMS MADE PERTAINING TO A PARTICULAR SPECIES, THEY SERVE AS PROOF OF IDENTIFICATION FOR SPECIES STUDIES, COLLECTIONS MAY ACHIEVE PROMINENCE BY DISCOVERY OR BY ASSOCIATION WITH PROMINENT EVENTS OR INDIVIDUALS,

5. PERIODIC UPDATING

FOR BIOLOGICAL COLLECTIONS REPRESENTING A PARTICULAR HABITAT OR PARK, PERIODIC UPDATING OF RESEARCH COLLECTIONS MAY BE NECESSARY. THE ADDITION OF A FEW SPECIMENS TO PREEXISTING SERIES MAY HELP ELUCIDATE HABITAT OR SPECIES TRENDS IN THE LONGTERM FUTURE. THIS MUST NOT BE CONSTRUED AS AN EXCUSE TO ANNUALLY WIPE OUT MANY TENS OR HUNDREDS OF SPECIMENS IN THE PARK JUST TO ENLARGE THE COLLECTION. DISCRETION AND CONSERVATION SHOULD BE PRIMARY GUIDES.

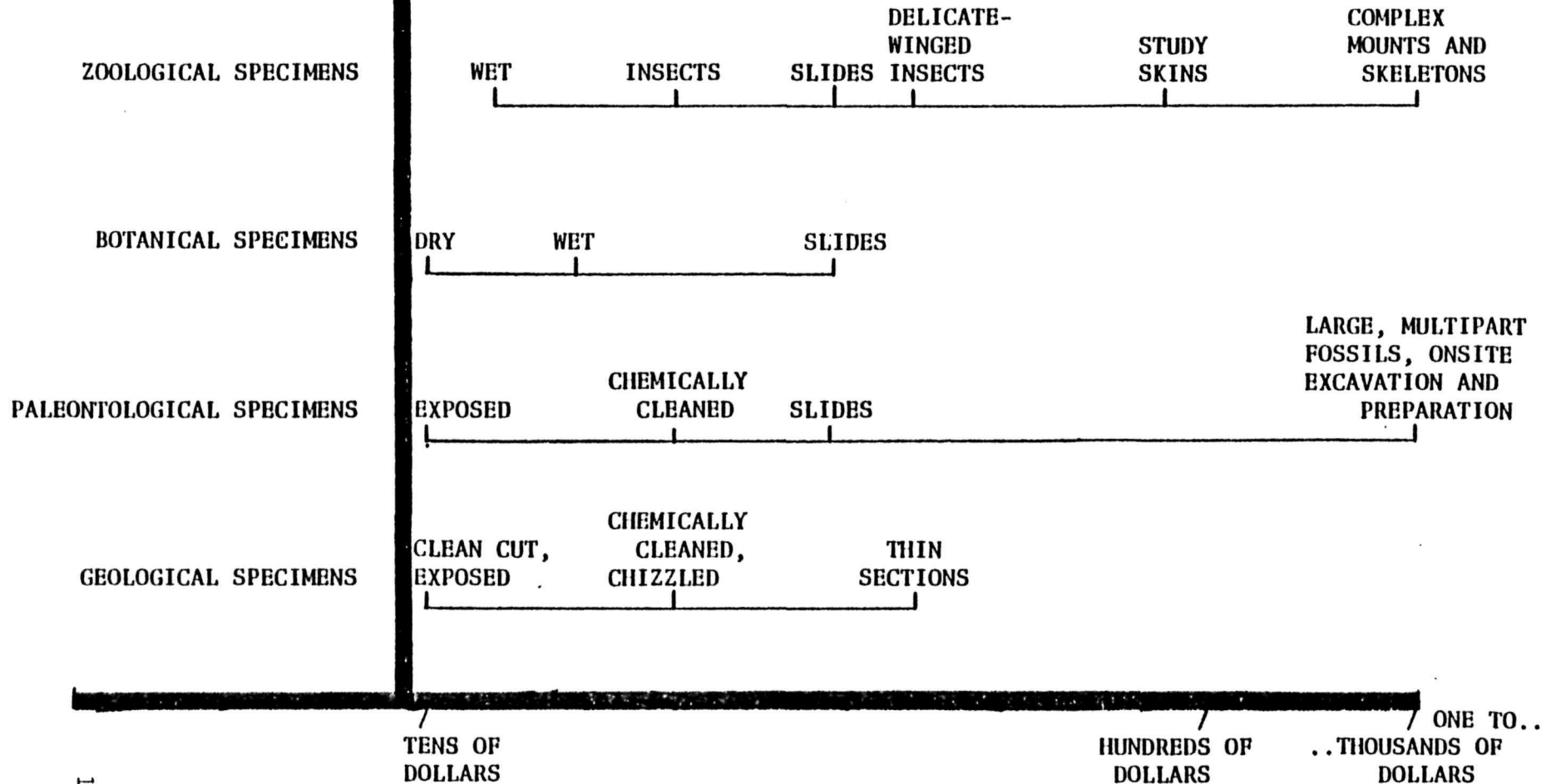
III. CURATION

1. VALUE OF COLLECTIONS

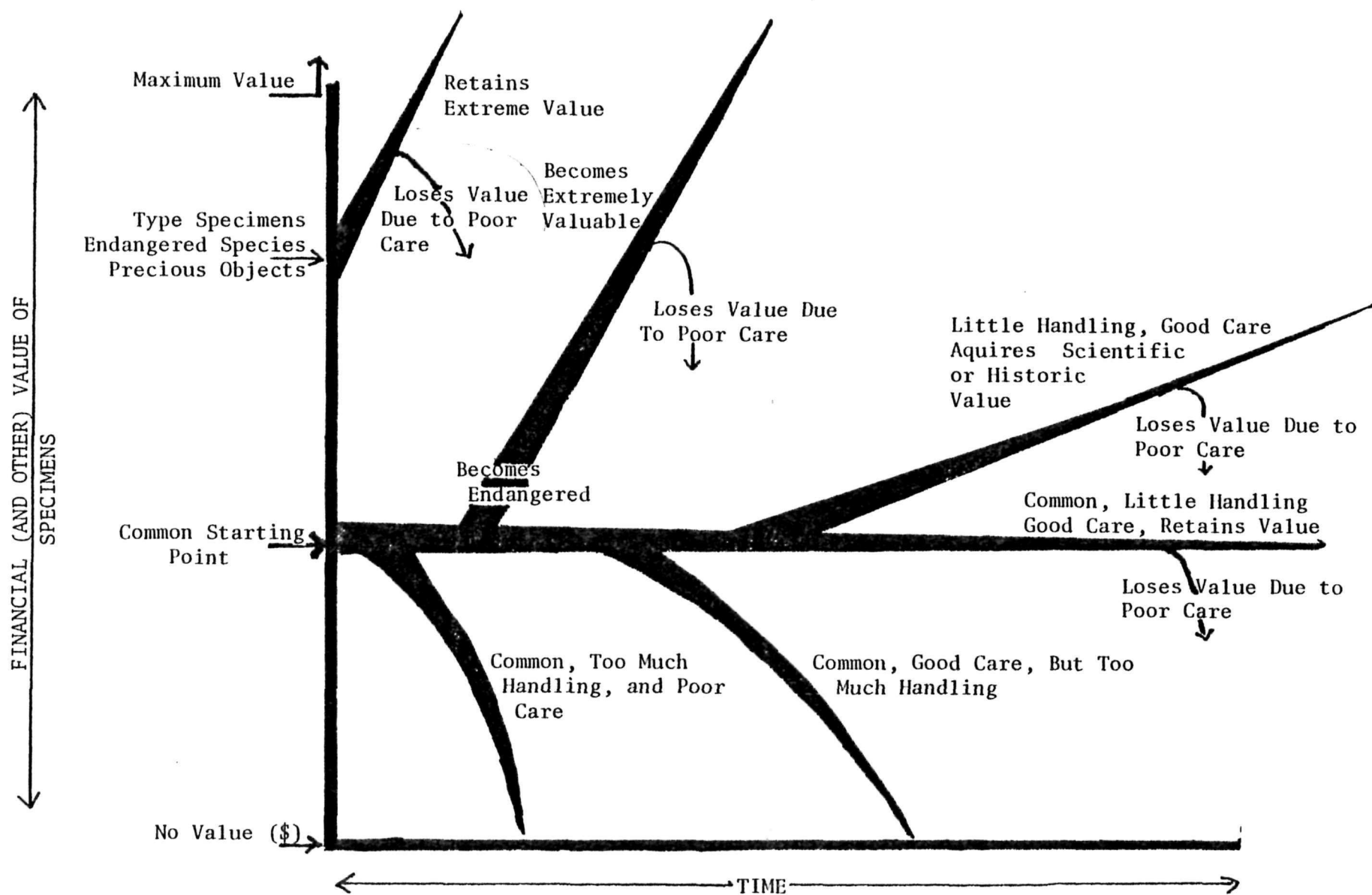
THE VALUE OF MUSEUM SPECIMENS, WHETHER BIOLOGICAL, GEOLOGICAL, ANTHROPOLOGICAL OR HISTORICAL IS REFLECTED LARGELY IN THE REPLACEMENT COST OF THE SPECIMEN MULTIPLIED BY THE NUMBER OF YEARS THE SPECIMEN HAS BEEN IN THE COLLECTION. OF COURSE, VALUE IS SERIOUSLY AFFECTED BY THE CONDITION OF THE SPECIMEN.

RELATIVE COSTS OF LABORATORY PREPARATION OF NATIONAL PARK SERVICE NATURAL HISTORY SPECIMENS

TAXONOMIC TYPES OR KINGDOMS



GROSS APPROXIMATION OF RELATIVE COSTS FOR PREPARATION (THOUSANDS--
REFERRING TO LABOR INTENSIVE EXCAVATIONS)



INFLUENCE OF TIME, HANDLING AND QUALITY OF CARE ON THE DETERIORATION OF
NATIONAL PARK SERVICE NATURAL HISTORY SPECIMENS

2. CURATORIAL RESPONSIBILITIES

CONSIDERING THAT MOST PARKS ARE ALREADY UNDER STAFFED AND MOST EMPLOYEES' WORK LOADS ARE ALREADY TAXED, IT IS IMPORTANT TO SET PRIORITIES. SPECIMENS SHOULD BE CONTINUOUSLY MONITORED AND NOTES TAKEN ON THEIR CONDITIONS AND THEY SHOULD BE PREVENTED FROM DECAY. A UNIQUE CHARACTERISTIC OF NATURAL HISTORY SPECIMENS IS THAT THEY ARE OFTEN COMPOSED OF SOFT ORGANIC MATTER AND REQUIRE LIQUID PRESERVATION MEDIA. THE MINIMUM CONDITIONS/ITEMS THAT REQUIRE ATTENTION ARE:

- SOLUTION LEVELS
- INSECTS AND OTHER PEST INVASIONS
- MOLD
- USE OF THE COLLECTION
- LABELS
- DUST ACCUMULATIONS

IF A COLLECTION IS TO BE IMPROVED OR ENLARGED, IT SHOULD BE FORESEEN WHAT SORT OF STORAGE, CURATORIAL CARE, ETC., THE NEW SPECIMENS WILL REQUIRE. IF THESE CAN NOT BE PROVIDED IT IS SERIOUSLY WORTH CONSIDERING ALTERNATIVES TO SUCH AN EXPANSION.

3. ADMINISTRATION

ADMINISTRATION OF THE COLLECTION IS PRETTY MUCH THE SAME AS FOR HISTORIC OR ANTHROPOLOGICAL COLLECTIONS, SPECIAL CONSIDERATION FOR NATURAL HISTORY ITEMS SHOULD BE GIVEN AS IS DONE FOR ANY OTHER MUSEUM TRUST,

IV. SPECIAL SERVICES

1. CONSERVATION LABORATORY

SOME RESTORATION IS NOW POSSIBLE WITHIN THE NATIONAL PARK SERVICE AT THE CONSERVATION CENTER IN HARPERS FERRY, PRIMARILY FOR DISPLAY SPECIMENS,

2. CONSULTATION

AVENUES ARE OPEN AT HARPERS FERRY OR IN SCIENCE AND TECHNOLOGY IN WASO TO PROVIDE CONSULTATION IN THE PARKS FOR PROBLEMS OR QUESTIONS PERTAINING TO NATURAL HISTORY COLLECTIONS, SCIENCE AND TECHNOLOGY HAS ONGOING RESEARCH OR PROJECTS WHICH MAKE RESOURCES DIRECTLY APPLICABLE TO NATURAL HISTORY COLLECTIONS AVAILABLE TO THE FIELD, IN ADDITION A LIBRARY IS BEING BUILT TO SUPPLY REFERENCE CITATIONS, ETC., TO THE FIELD,

V. ONGOING PROJECTS

CURRENTLY, REVISIONS ARE BEING SUGGESTED TO MANAGEMENT POLICIES, AND SUPPLEMENTS ARE BEING PREPARED FOR THE MUSEUM HANDBOOK.

VI. MAINTAINING STANDARDS

MAINTAINING STANDARDS DEPENDS UPON THE ADMINISTRATIVE SUPPORT THAT CAN BE OBTAINED FROM THE FIELD AND THE FISCAL AND ADMINISTRATIVE SUPPORT THAT CAN BE OBTAINED FROM NPS IN WASO. FIELD RESPONSE AND ENTHUSIASM WILL UNDOUBTEDLY IMPROVE THE POTENTIAL OR "FOLLOW-THROUGH" IN THIS ENDEAVOR.