

# CONDITION REPORT AND TREATMENT PROPOSAL (Mounted Head)

gallery

**SPECIMEN:** Gemsbok (*Oryx gazella*), probably adult, gender not identified.

**CATALOG #:** Coe Hall (temp. no. 1)

**PROVENANCE:** Coe Hall at Planting Fields Arboretum State Historic Park, Oyster Bay, New York. Mounted on a support pillar for the mezzanine, across from the window wall in the Gallery (1st floor, room F.12). Possibly collected by William Robertson Coe (b.1869) who built Coe Hall, or his son, William Rogers Coe (b. 1901), ca. 1920-24. Coe Hall was a private home until 1949, when it was deeded to the State of New York. In 1955, the State University of New York obtained use of the site as a horticultural study campus and the house was used for classrooms and administration. Some furnishings, including taxidermy specimens, apparently remained in place during this period, and from 1970-78, when the building was used as a community center. In 1978, restoration of Coe Hall was begun, and it has been operated as an historic site since that time.

**STATUS:** *O. gazella* occur in Africa from Ethiopia and Somalia to Namibia and eastern South Africa. Gemsbok are still common in some parts of Africa and are not considered endangered or threatened at present.

**PREPARATION:** Mounted head and horns.

**DIMENSIONS:** D ~54 cm W ~36 cm H ~100 cm

**DESCRIPTION:** *(Specimen examined in situ, in ambient light with auxiliary illumination from a flashlight)*

**Specimen** Taxidermy mount of head and horns with soft tissues of nose and the eyelines modeled in wax. Skin shaped over wooden form. Some plaster modeling. Mouth closed. Metal earliners, possibly lead. Glass eyes, probably painted on reverse. At least one horn sheath (R horn) is mounted over an iron rod that replaces the horn core.

**Plaque** None.

**Labels** None visible in this examination.

**CONDITION:** *(Specimen examined in situ, in ambient light with auxiliary illumination from a flashlight)*

**General Specimen** Fair to poor. Dusty overall. Large areas of skin cracks.

**Hair** Becoming very thin overall. Dark pigments faded. Light pigments have developed a yellowish cast, possibly from oxidation over time.

**Skin** Brittle. Numerous cracks and tears, especially on face.

**Eyes** Glass dusty. Tears and cracks in skin at both corners of both eyes. Cracks below L eye on face. Large skin tear, lifting, over R eye. Long crack below horn and down to a fairly large void in the skin over the L eye. Eyelines generally intact, but small void in L eyeline.

**Ears** Metal liners are slightly corroded and are slightly distorted. Skin voids and tears on both ears, with most of skin missing from backs of both ears.

**Nose** Large tear over top of nose. Tears and voids in wax and paint on skin of nostrils.

<i>Mouth</i>	Skin torn and lifting on upper lip. Cracks at R and L corners. Tear across lower jaw at chin, with at least 2 cracks perpendicular to it. Both lips cracked.
<i>Teeth</i>	Not applicable.
<i>Horns</i>	Some corrosion on interior iron alloy rod in R horn sheath. Dusty and dirty overall. Void at inside base of R sheath. Interior of L sheath not examined.
<i>Neck</i>	Long tear in skin on L side, with another, L-shaped crack above it into the mane. Old, stitched, skin repair on R side and 2 small old repairs on L side. Numerous small dark stains, possibly old repairs on R side.
<b>Plaque</b>	Not applicable.
<b>Labels</b>	None found during this examination.

**ANALYSES:** Testing for the presence of arsenic (see attached for discussion of test procedure) produced a positive result for this specimen.

**PROPOSED TREATMENT:**

1. Clean specimen using HEPA filtered vacuum. Vacuum through a screen, if necessary to protect hair, but use direct vacuuming to the degree possible to remove ingrained dust.
2. Clean horn sheaths, glass eyes, and wax and painted areas using 95% ethanol on lightly dampened swabs or polyvinyl alcohol sponges, after testing to determine the solubility of the paints (paints of this era when the specimen was likely to have been mounted should be fairly stable to ethanol). To the extent possible, clean the iron alloy rod in the R horn sheath with 95% ethanol.
3. Reattach lifting skin using B-72 (ethyl methacrylate/methyl acrylate copolymer resin) as 50% solids in reagent grade acetone with a small amount of 95% ethanol added (acetone soluble when dry).
4. Infill voids in skin, horn sheath, and wax using either B-72 (as above) bulked with Cabosil (fumed silica) or A4M (4,000 mol. wt.) grade methyl cellulose bulked with L tissue and mulberry tissue (softens in water and/or ethanol/water mixtures when dry).
5. Coat earliners with B-72 ~10% solids in reagent grade acetone (acetone soluble when dry).
6. Infill voids on skin on ears using National Fiber Technologies synthetic hair, if possible. Thin and trim hair. Attach to earliners using either B-72 50% solids in reagent grade acetone, or Lascaux 390 HV (butyl acrylate/methyl acrylate copolymer emulsion, soluble in acetone when dry). Infill large skin voids in same manner, as appropriate.
7. Tint infills using Daler Rowney acrylic paints with high lightfastness, thinned in water (ethanol soluble when dry).
8. Test various solvents to reduce dark stains on neck.
9. Check the base of the form for labels or other information and if found, record photographically or digitally.
10. Clean base by vacuuming and then with solvents as testing may show to be appropriate.
11. Prepare a black Volara 2A (irradiation crosslinked, expanded polyethylene foam with carbons black filler) pad to cushion the specimen while on display, making sure the pad does not obscure any

**TREATMENT RATIONALE:**

By reattaching the skin with a strong but still moderately extensible adhesive, there may be less chance for additional distortion and tearing of the skin as a response to humidity fluctuations in the future. This will also make it possible for staff to undertake routine maintenance on the specimen without further jeopardizing the skin. Repairs will improve the visual appearance of the mount, but will not make it appear as it did originally (e.g., hair will not generally be recolored to try to approximate original coloration). Careful examination will provide an opportunity to recover additional information about the history of the specimen. All materials to be used in the proposed treatments are synthetics and could not be mistaken for original specimen or original specimen preparation materials in x-radiography or other analysis, and should not interfere with biochemical analysis of untreated areas of the skin.

**PHOTOGRAPHY:**

**Before treatment**

(October 2000) ASA 200 Kodak color prints (see photography records, filed by roll and negative number) and digital images (attached).

Roll 1:21-22

2:02-04

**REFERENCES:**

Down, J., M. MacDonald, J. Tetreault, and R. Williams. 1992. *Adhesive Testing at the Canadian Conservation Institute - An Evaluation of Selected Poly(vinyl acetate) and Acrylic Adhesives*. Environment and Deterioration Report No. 1603. Canadian Conservation Institute, Ottawa.

Nowak, R. and J. Paradiso. 1983. *Walker's Mammals of the World*. 4th ed. The Johns Hopkins University Press. Baltimore and London.

Ruehrwein, R. 1997. Coe Hall at Planting Fields Arboretum State Historic Park. The Creative Company, Lawrenceburg, Indiana.

**ESTIMATE:**

~ 30 hours, including written, digital, and photographic documentation of the work (2 hours). The estimate assumes that the specimen will be removed from the wall, but will be treated on site, and that no more than 1 year has elapsed between preparation of this report and the actual treatment.

**ADDITIONAL CONDITION/TREATMENT NOTES:**

**TREATMENT APPROVED:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

(legal custodian or authorized agent)

**Conservator:** Catharine Hawks

**Date:** 17 October 2000



## TREATMENT REPORT (Mounted Head)

**SPECIMEN:** Gemsbok (*Oryx gazella*), probably adult, gender not identified.

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**PROVENANCE:** Coe Hall at Planting Fields Arboretum State Historic Park, Oyster Bay, New York. Mounted on a support pillar for the mezzanine, across from the window wall in the Gallery (1st floor, room F.12). Possibly collected by William Robertson Coe (b.1869) who built Coe Hall, or his son, William Rogers Coe (b. 1901), *ca.* 1920-24. Coe Hall was a private home until 1949, when it was deeded to the State of New York. In 1955, the State University of New York obtained use of the site as a horticultural study campus and the house was used for classrooms and administration. Some furnishings, including taxidermy specimens, apparently remained in place during this period, and from 1970-78, when the building was used as a community center. In 1978, restoration of Coe Hall was begun, and it has been operated as an historic site since that time.

On 16 September 2002, the specimen was carefully removed from the wall by Marshall Fine Arts of Deer Park, NY, and placed, hanging upright, on a wood support for treatment.

Based on label found on specimen (see below) after removal from wall, taxidermy was the work of James Lippitt. Clark (1883-1969), a well-known taxidermist and artist who worked with Carl Akeley at the American Museum of Natural History and had a private studio in New York. He prepared specimens for Theodore Roosevelt and other prestigious clients.

**STATUS:** *O. gazella* occur in Africa from Ethiopia and Somalia to Namibia and eastern South Africa. Gemsbok are still common in some parts of Africa and are not considered endangered or threatened at present.

**PREPARATION:** Mounted head and horns.

**DIMENSIONS:** D ~54 cm W ~36 cm H ~100 cm

**DESCRIPTION:** *Specimen examined in situ, in ambient light with auxiliary illumination from a flashlight, 17 October 2000 (see Condition Report). Additional descriptive information noted during cleaning and treatment under Ott lamps and ambient light, 2002.*

**Specimen** Taxidermy mount of head and horns with soft tissues of nose and the eyelines modeled in wax. Skin shaped over wooden form. Form may be covered with a woven textile that has been coated with an unidentified adhesive. Some plaster modeling. Mouth closed. Metal earliners, possibly lead. Glass eyes, probably painted on reverse.

**Plaque** None.

**Hanging hardware** Iron alloy plate attached to top edge of wooden form.

<b>Labels</b>	Plated metal label on neck end of wooden form is embossed, "MOUNTED BY/JAMES L. CLARK/NEW YORK" and is attached to the form with 2 small brads.
<b>CONDITION:</b>	<i>Specimen examined in situ, in ambient light with auxiliary illumination from a flashlight, 17 October 2000 (see Condition Report). Additional condition information noted during cleaning and treatment under Ott lamps and ambient light, 2002.</i>
<b>General</b>	Fair to poor. Dusty overall. Large areas of skin cracks. Specimen has the appearance of having sustained a sharp blow on the right side that may have been the source of damage to the R horn, and has distorted the right side of the face, especially at the nose. In addition, the extensive hair slippage and some old repairs that appear to be part of original preparation, suggest that the specimen was not in good condition when initially mounted.
<b>Specimen</b>	
<i>Hair</i>	Becoming very thin overall. Dark pigments faded. Light pigments have developed a yellowish cast, possibly from oxidation over time. Void in hair and skin on forehead, next to R horn.
<i>Skin</i>	Brittle. Numerous cracks and tears, especially on face.
<i>Eyes</i>	Glass dusty. Tears and cracks in skin at both corners of both eyes. Cracks below L eye on face. Large skin tear, lifting, over R eye. Long crack below horn and down to a fairly large void in the skin over the L eye. Eyelines generally intact, but small void in L eyeline. Small stitched, old repair, possibly part of original preparation, at outside edge of L eye. L eye slightly loose in modeling material.
<i>Ears</i>	Metal liners are slightly corroded and are distorted. Ears have the appearance of having had a covering of modeling material over the earliners and under the skin at some point in the past. Hair and skin pieces appear to have been re-attached directly to the metal earliners in random fashion with an unidentified adhesive on the exterior (back) of both ears, and to the inside of the R ear. Skin voids and tears on both ears, with most of skin missing from backs of both ears. Large cracks and voids in the skin inside the ears, and large voids in modeling materials inside and outside the R ear.
<i>Nose</i>	Large tear over top of nose. Tears and voids in skin and much loss of plaster modeling on right side, and right nostril. General distortion of the skin on R side.
<i>Mouth</i>	Skin torn and lifting on upper lip. Cracks at both corners. Tear across lower jaw at chin, with at least 2 cracks perpendicular to it. Both lips cracked.
<i>Teeth</i>	Not applicable.
<i>Horns</i>	Unidentified metal alloy rod(s) have been used to repair broken horn core inside R horn sheath, with unidentified modeling material added at base of horn sheath to secure it after repair. The repair has been torn almost completely loose, and the sheath tilts back and to the right. Dusty and dirty overall. Void (possibly a nail hole?) at inside base of R sheath. Interior of L sheath not examined. Heavy fill, possibly part of original preparation around base of L horn sheath. Parts of this fill are now missing.
<i>Neck</i>	Long tear in skin on L side, with another, L-shaped crack above it into the mane. Old, stitched, skin repair on R side and 2 small old repairs on L side (all of which may have been part of original preparation). Numerous small dark stains, possibly old repairs on R side.
<b>Plaque</b>	Not applicable.



**Labels**

Label on wooden form is distorted and appears to have lost much of its plating.

**ANALYSES:**

Testing for the presence of arsenic (see attached for discussion of test procedure) produced a positive result for this specimen.

The unidentified adhesive used with the cloth (?) over the wooden form in the nose appears to be soluble in acetone, as it tended to dissolve during efforts to consolidate the loose plaster inside the nose using B-72 as a thin solution in acetone.

**PROPOSED TREATMENT:**

1. Clean specimen using HEPA filtered vacuum. Vacuum through a screen, if necessary to protect hair, but use direct vacuuming to the degree possible to remove ingrained dust.
2. Clean horn sheaths, glass eyes, and wax and painted areas using 95% ethanol on lightly dampened swabs or polyvinyl alcohol sponges, after testing to determine the solubility of the paints (paints of this era when the specimen was likely to have been mounted should be fairly stable to ethanol). To the extent possible, clean the iron alloy rod in the R horn sheath with 95% ethanol.
3. Reattach lifting skin using B-72 (ethyl methacrylate/methyl acrylate copolymer resin) as 50% solids in reagent grade acetone with a small amount of 95% ethanol added (acetone soluble when dry).
4. Infill voids in skin, horn sheath, and wax using either B-72 (as above) bulked with Cabosil (fumed silica) or A4M (4,000 mol. wt.) grade methyl cellulose bulked with L tissue and mulberry tissue (softens in water and/or ethanol/water mixtures when dry).
5. Coat earliners with B-72 ~10% solids in reagent grade acetone (acetone soluble when dry).
6. Infill voids on skin on ears using National Fiber Technologies synthetic hair, if possible. Thin and trim hair. Attach to earliners using either B-72 50% solids in reagent grade acetone, or Lascaux 390 HV (butyl acrylate/methyl acrylate copolymer emulsion, soluble in acetone when dry). Infill large skin voids in same manner, as appropriate.
7. Tint infills using Daler Rowney acrylic paints with high lightfastness, thinned in water (ethanol soluble when dry).
8. Test various solvents to reduce dark stains on neck.
9. Check the base of the form for labels or other information and if found, record photographically or digitally.
10. Clean base by vacuuming and then with solvents as testing may show to be appropriate.
11. Prepare a black Volara 2A (irradiation crosslinked, expanded polyethylene foam with carbons black filler) pad to cushion the specimen while on display, making sure the pad does not obscure any label data on the base. Adhere to form using 3M #415 doubled-sided tape (acrylic adhesive).

**TREATMENT RATIONALE:**

By reattaching the skin with a strong but still moderately extensible adhesive, there may be less chance for additional distortion and tearing of

the skin as a response to humidity fluctuations in the future. This will also make it possible for staff to undertake routine maintenance on the specimen without further jeopardizing the skin. Repairs will improve the visual appearance of the mount, but will not make it appear as it did originally (e.g., hair will not generally be recolored to try to approximate original coloration). Careful examination will provide an opportunity to recover additional information about the history of the specimen. All materials to be used in the proposed treatments are synthetics and could not be mistaken for original specimen or original specimen preparation materials in x-radiography or other analysis, and should not interfere with biochemical analysis of untreated areas of the skin.

**TREATMENT APPROVAL:** Treatment approval signed by Ellen Cone Busch on 16 September 2002. Modifications to original proposal were discussed with her during the course of the work.

#### **ACTUAL TREATMENT:**

##### **Cleaning**

1. Vacuumed with a HEPA filtered vacuum, equipped with small brush as the nozzle.
2. Cleaned hair surface with ethanol/water solution on microfiber cleaning cloths and Kimwipes.
3. Cleaned horns using soot removal sponges, then with 50% ethanol/water solution on swabs and Kimwipes.
4. To degree possible, cleaned metal earliners with 95% ethanol.
6. To degree possible, cleaned ferrous metal hanging hardware using 95% ethanol.

##### **Repairs**

1. To the degree possible, coated hanging hardware and earliners using a thin solution of B-72 (ethyl methacrylate/methylacrylate copolymer resin) in reagent grade acetone. Repeated coating.
2. To degree possible, consolidated loose plaster under skin of nose and face using a thin solution of solution of B-72 in acetone, followed by a 25% solution.
4. Made small fills in eyelines and using a 50% solution of B-72 (ethyl methacrylate/methylacrylate copolymer resin) solids in reagent grade acetone, bulked with fumed silica (Cabosil).
5. Applied a barrier coating in the areas underneath R horn sheath and in the void in the filling around L horn sheath with a 50% solution of B-72 (ethyl methacrylate/methylacrylate copolymer resin) solids in reagent grade acetone. After coating dried, made an infill under each horn sheath using a 2-component epoxy resin (Pliantex) to support and anchor the horn sheaths.
6. Made fills of Pliantex for the backs of both ears, over the B-72 coating on the earliners, then re-attached the small fragments of skin to the epoxy using B-72 50% solids in reagent grade acetone.
7. Re-attached loose or lifting skin at cracks and re-secured L eye in socket using B-72 50% solids in grade acetone (HMG B-72 adhesive).
8. Made a small infill on L side of face below inner corner of L eye, and supported skin under tear on R side of face below eye using white Volara 2A foam, attached with 50% B-72 in reagent grade acetone.
9. Made large infills in skin and modeling voids on nose, on L side of forehead, inside R ear and on cracked skin in L ear using 4,000 molecular



weight methylcellulose bulked with alpha cellulose fiber (Bookmakers A4M as a gel in deionized water, bulked with L tissue fibers).

10. Made small infills of synthetic (acrylic) hair (National Fiber Technologies #13) on edges of ears, and at base of right horn (National Fiber Technologies #11) attached with 50% solution of B-72 in acetone (HMG B-72 adhesive).

11. Tinted infills using acrylic paints (Liquitex, Daler Rowney, Windsor Newton) mixed in deionized water (ethanol soluble when dry).

#### Other

Left black Volara 2A and 3M 415 double-sided tape for use in making pads at base wooden form in each mount when Marshall Fine Arts arrives to replace the trophies on the walls in Coe Hall.

Fragments of skin, modeling material, and hair from right side of nose were placed in a polyethylene sample bag and given to the curator.

#### PHOTOGRAPHY:

October 2000. ASA 200 Kodak color prints (see photography records, filed by roll and negative number) and images.

September 2002. ASA 200 Ektachrome slides and 200 ASA Kodak color prints taken with a Nikon autofocus camera and digital images taken with a Sony Cybershot camera.

#### Before treatment

Roll no: 01: 21-22 02:02-04

Images: Coe 1 2002: 1605-1606 (label on base of form); 1631 (back of L ear); 1632 (back of R ear)

#### During treatment

None

#### After treatment

Roll no: 05: 16-18, 20, 22-25

Images: Coe 2 2002: 1687 (R side); 1688 (L side); 1689 (back of ears); 1690 (nose); 1691 (L eye); 1692 (R eye); 1693 (fill in front of R horn); 1694 (ears); 1695 (ears)

#### REFERENCES:

Clark, J.L. 1966. *Good Hunting: Fifty Years of Collecting and Preparing Habitat Groups for the American Museum*. University of Oklahoma Press, Norman.

Down, J., M. MacDonald, J. Tetreault, and R. Williams. 1992. *Adhesive Testing at the Canadian Conservation Institute - An Evaluation of Selected Poly(vinyl acetate) and Acrylic Adhesives*. Environment and Deterioration Report No. 1603. Canadian Conservation Institute, Ottawa.

Nowak, R. and J. Paradiso. 1983. *Walker's Mammals of the World*. 4th ed. The Johns Hopkins University Press. Baltimore and London.

Ruehrwein, R. 1997. *Coe Hall at Planting Fields Arboretum State Historic Park*. The Creative Company, Lawrenceburg, Indiana.