

CONDITION REPORT AND TREATMENT PROPOSAL (Mounted Head)

gallery

SPECIMEN: Bighorn Sheep (*Ovis canadensis*), adult, male.

CATALOG #: Coe Hall (temp. no. 3)

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. Canadensis* occur in southwestern Canada, parts of western US, northern Mexico, Baja California. There are some extinct subspecies, and numbers generally are greatly reduced. Hunting has been prohibited or controlled since the early 1900s, and *O. Canadensis* are on Appendix 2 of the CITES.

PREPARATION: Mounted head and horns.

DIMENSIONS: D ~54 cm W ~66 cm H ~77 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. Iron alloy hanging hardware visible at nape of neck.

Plaque None.

Labels Unidentified octagonal tag, metal alloy, stamped, "8779" suspended by wire from L ear.

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

General Specimen Fair to poor. Dusty overall.

Hair Brittle. Hair tips broken and missing in large areas overall. Some hair voids. Dark pigments faded. Light pigments have developed a yellowish/orange cast, possibly from oxidation over time.

Skin Brittle. Torn between horns with large section of skin detaching and distorted.

Eyes Glass dusty. Possible slight crazing of glass. Small cracks and small skin void at inner corner of R eye and eyeline cracked. L eyeline cracked and small crack in skin at inner corner.

Ears R ear dirty and with some skin cracks. L ear torn over liner at tip.

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| <i>Nose</i> | Nostril torn, voids in skin and cracks at both sides. Very little modeling on nose and skin is badly torn and lifting. |
| <i>Mouth</i> | Upper lip cracked. Cracks into chin from lower lip, including 1 large crack. |
| <i>Teeth</i> | Not applicable. |
| <i>Horns</i> | Old repair at top of first curve on R horn is lifting along top and front edges. Scratches on both horns and especially on R sheath where accessible from mezzanine. Tips of both horns worn, which may be damage that occurred during the life of the animal. |
| <i>Neck</i> | Hair voids and broken hair tips. |
| Plaque | Not applicable. |
| Labels | Minor corrosion on metal ear tag. Wire very corroded. |
| 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 to protect hair.
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).
3. Clean metal tag and wire using 95% ethanol.
4. 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).
5. Infill void around repair in R horn sheath and small skin voids 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).
6. Coat wire on metal tag using B-72 ~10% solids in reagent grade acetone (acetone soluble when dry).
7. Tint infills using Daler Rowney acrylic paints with high lightfastness, thinned in water (ethanol soluble when dry).
8. Check the base of the form for labels or other information and if found, record photographically or digitally.
9. Clean base by vacuuming and then with solvents as testing may show to be appropriate.
10. 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.

PHOTOGRAPHY:

Before treatment

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

Roll 2:05-06, 08-12

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:

~ 10 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)

TREATMENT REPORT (Mounted Head)

SPECIMEN: Bighorn Sheep (*Ovis canadensis*), adult, male.

CATALOG #: Coe Hall (temp. no. 3)

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. Specimen was prepared by James L. Clark.

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.

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PREPARATION: Mounted head and horns.

DIMENSIONS: D ~54 cm W ~66 cm H ~77 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. Some plaster modeling. Mouth closed. Lead earliners. Glass eyes, probably painted on reverse. Iron alloy hanging hardware visible on wooden form at nape of neck.

Plaque None.

Mounting hardware Ferrous metal plate with hole for wall hook, attached to top edge of wooden form.

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| Labels | Octagonal metal tag, unidentified alloy, stamped, "8779" suspended by ferrous metal wire that is tightly wrapped around L ear. Above tag, wire is sealed with a metal (lead?) seal embossed, "_ Y_/GAME/TAG". |
| | Metal tag, (unidentified alloy, but apparently plated) attached to base of neck of wooden form is embossed, "MOUNTED BY/JAMES L. CLARK/ NEW YORK". Metal tag is attached to the wood with two brads. |
| CONDITION: | <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> |
| General | Fair to poor. Dusty overall. |
| Specimen | |
| <i>Hair</i> | Brittle. Hair tips broken and missing in large areas overall. Some hair voids. Dark pigments faded. Light pigments have developed a yellowish/orange cast, possibly from oxidation over time. |
| <i>Skin</i> | Brittle. Torn between horns with large section of skin detached and distorted. Skin at forehead torn and distorted below void. |
| <i>Eyes</i> | Glass dusty. Possible slight crazing of glass. Small cracks and small skin void at inner corner of R eye and eyelid cracked. L eyelid cracked and small crack in skin at inner corner. |
| <i>Ears</i> | R ear dirty and with some skin cracks. L ear torn over liner at tip and has large voids in skin and hair on the interior. Earliners corroded. Wire attaching tags is very tightly wrapped around the ear and has slightly distorted the skin. |
| <i>Nose</i> | Nostrils torn, large voids in skin and tears at both sides. Very little skin or modeling remains on nose and skin is badly torn and lifting. Most of R nostril is gone over the wooden form. |
| <i>Mouth</i> | Upper lip torn and has several voids. Tear in skin from lower lip to throat and skin has shrunk so that it no longer meets over the chin. |
| <i>Teeth</i> | Not applicable. |
| <i>Horns</i> | Old repair or natural re-growth (?) at top of first curve on R horn is lifting along top and front edges. Scratches on both horns and especially on R sheath where accessible from mezzanine. There are areas of old re-growth, probably over old injuries, especially on R horn. Tips of both horns worn, which may be damage that occurred during the life of the animal. |
| <i>Neck</i> | Hair voids and broken hair tips. |
| Plaque | Not applicable. |
| Mounting hardware | Corroded. |
| Labels | Minor corrosion on metal ear tag and seal. Wire very corroded. Top edge of seal is distorted. Wire is wrapped around ear very tightly. |
| 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 to protect hair.
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).
3. Clean metal tag and wire using 95% ethanol.
4. 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).
5. Infill void around repair in R horn sheath and small skin voids 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).
6. Coat wire on metal tag using B-72 ~10% solids in reagent grade acetone (acetone soluble when dry).
7. Tint infills using Daler Rowney acrylic paints with high lightfastness, thinned in water (ethanol soluble when dry).
8. Check the base of the form for labels or other information and if found, record photographically or digitally.
9. Clean base by vacuuming and then with solvents as testing may show to be appropriate.
10. 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.

ACTUAL TREATMENT:**Cleaning**

1. Cleaned specimen using HEPA filtered vacuum to degree feasible, given poor condition of hair.

2. Cleaned horn sheaths, glass eyes, and wax and painted areas using a 50% solution of 95% ethanol in deionized water on lightly dampened swabs and Kimwipes.
3. Cleaned lead earliners (to degree possible), mounting hardware (to degree possible), and metal tag, seal, and wire (to degree possible) using 95% ethanol.

Repair

1. Reattached lifting skin and detached piece of skin on forehead using B-72 (ethyl methacrylate/methylacrylate copolymer resin) as 50% solids in reagent grade acetone with a small amount of 95% ethanol added, bulked with fumed silica (Cabosil). Adhesive is acetone soluble when dry.
2. Coated lead earliners (to degree possible), mounting hardware, metal tag, and metal seal using a thin solution of B-72 (ethyl methacrylate/methylacrylate copolymer resin) in acetone. Did not coat wire for metal tags, which is very tightly wrapped around L ear.
3. Infilled voids in eyelines using B-72 (ethyl methacrylate/methylacrylate copolymer resin) as 50% solids in reagent grade acetone with a small amount of 95% ethanol added, bulked with fumed silica (Cabosil). Adhesive is acetone soluble when dry.
4. Infilled areas around torn or breaking skin on interior of ears using or 4,000 mol. wt. methylcellulose bulked with alpha cellulose fiber (Bookmakers A4M as a gel in deionized water, bulked with L tissue fibers). Fill material softens in water and/or ethanol/water mixtures when dry. Infilled large skin and hair void in L ear using synthetic (acrylic) hair (National Fiber Technologies no. 13) embedded into the methylcellulose fill material.
5. Re-attached skin on nose and mouth, and on tip of L ear using B-72 (ethyl methacrylate/methylacrylate copolymer resin) as 50% solids in reagent grade acetone with a small amount of 95% ethanol added.
6. Infilled voids in skin and modeling material on nose and mouth using 4,000 mol. wt. methylcellulose bulked with alpha cellulose fiber (Bookmakers A4M as a gel in deionized water, bulked with L tissue fibers). Note that these are large fills, made in several layers, to replace the missing tissue and modeling material. Fill material softens in water and/or ethanol/water mixtures when dry.
7. Tinted infills using artist's acrylic paints (Liquitex, Daler Rowney, Windsor Newton) mixed in deionized water (ethanol soluble when dry). Also tinted abraded area along front edge of old repair/old re-growth on first curve of R horn using same paints.

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.

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 02: 05-06, 08-12 04: 35

Images: Coe 1 2002: 1600-1601, 1603 (metal label on base of form); 1617 (detached and detaching skin on forehead)

During treatment None

After treatment Roll 05: 06-10

Images: Coe 2 2002: 1667 (R side); 1668 (L side); 1669 (R eye); 1670 (R ear); 1674 (nose); 1676 (L side nose); 1677 (R side nose)

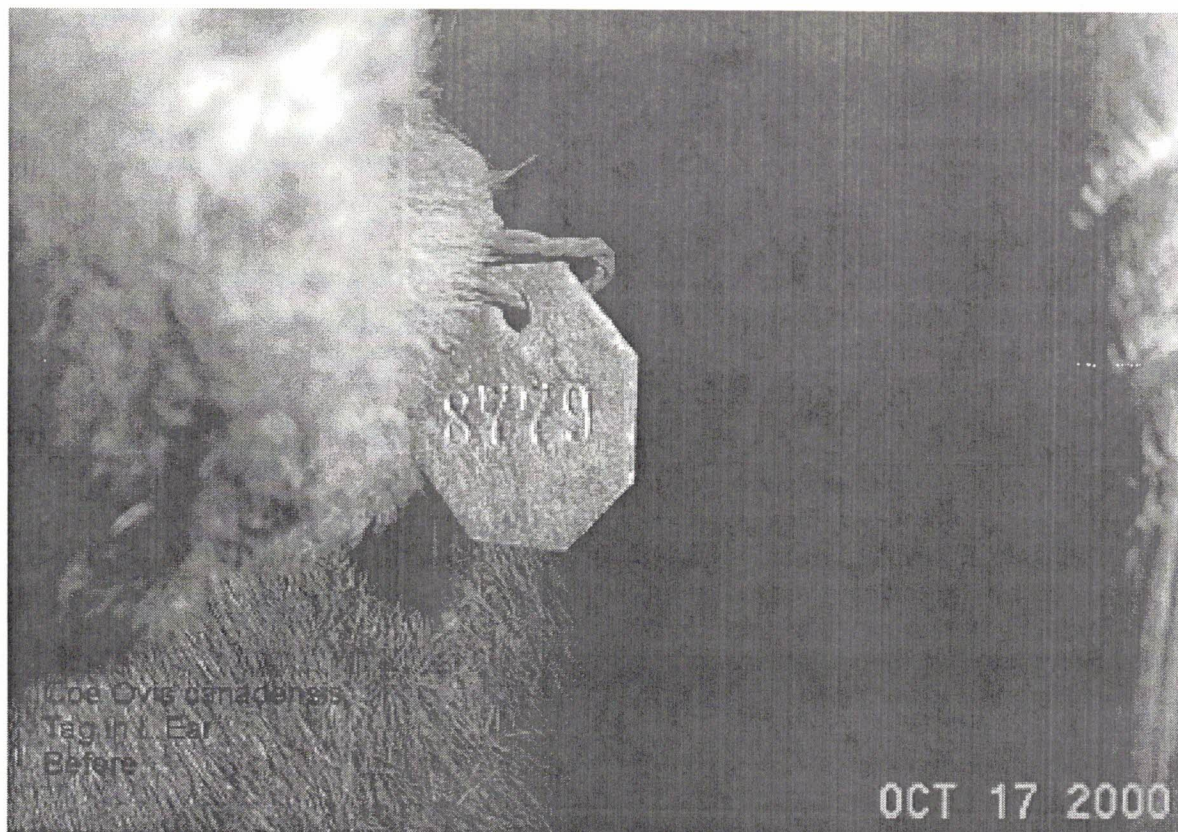
REFERENCES:

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.



Ovis canadensis
Tag in Ear
Before

OCT 17 2000

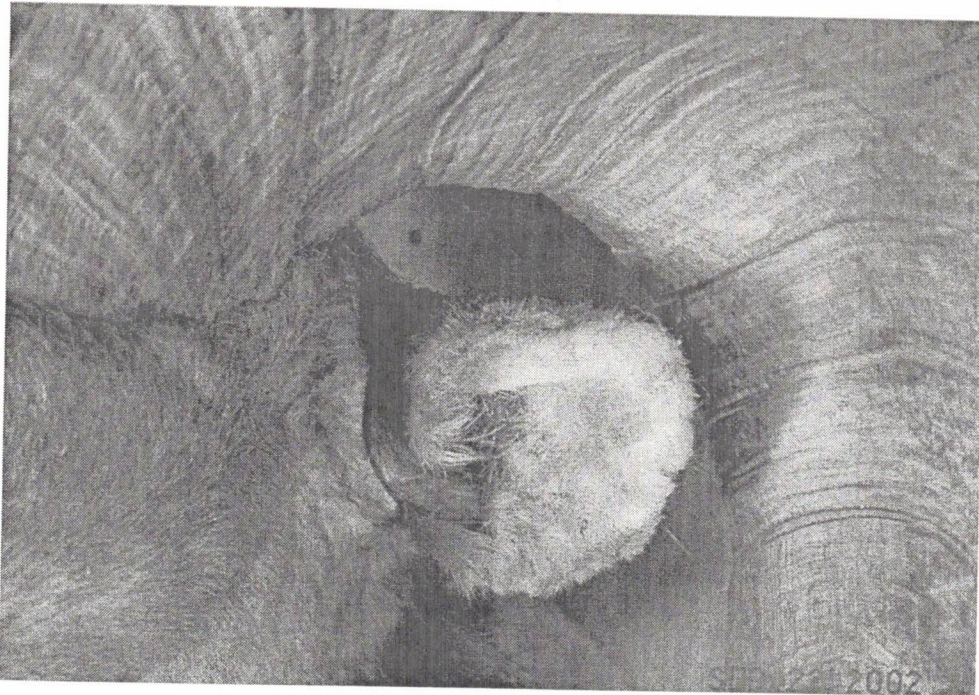


Ovis canadensis
R side head
Before

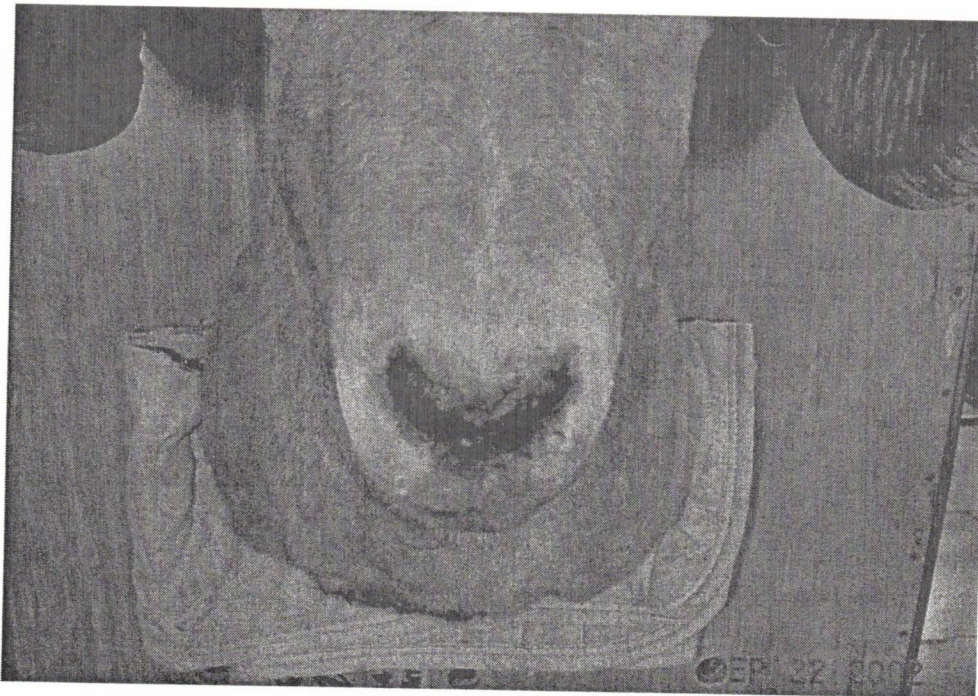
OCT 17 2000



Coe Hall Bighorn Sheep (no. 03). Right side, after treatment



Coe Bighorn Sheep (no. 03). Left ear, after treatment



Coe Bighorn Sheep (no. 03). Nose, after treatment