WORLD OSTRICHT ASSOCIATION

Ostrich Green Skin
and
Finished Leather Grading
Introduction

The Klein Karoo Cooperative (KKLK) originally set the standards for ostrich skins as the only suppliers of the product, these standards set in an environment of strict control of supply. The opening up of the industry in the early 1990’s resulted in greatly increased numbers of slaughter birds around the world, with the numbers in South Africa doubling in a very short period. Instead of matching this increase in slaughter with the development of new markets, the new entrants chose to sell into the existing markets. This turned a seller’s market, with excessively high prices achieved by limiting supplies, into a buyer’s market with many new players selling skins to the same limited number of buyers.

NOPSA (National Ostrich Processors South Africa) set some basic grading to provide a basis for pricing of both selling price as well as the price paid to the producer. Grading skins in crust gives producers the best price. The downside of this is the delay in payment to the producers. During the development of our industry many producers export their skins to tanneries in a different country and often via traders who provide a consolidation service to achieve economically viable shipments. In this situation it is necessary to have a payment system to enable payment to producers prior to shipment.

A good grading system is necessary to provide incentive to farmers to produce good skins and for the sellers of finished skins to optimise prices. At current prices, the difference in value of a grade 1 and a grade 4 skin can be equivalent to the total feed costs of a slaughter bird, so there is every benefit for producers to take care of skin quality.

Scars and blemishes currently form the basis for grading with further penalties for poorly developed follicles and skins deemed too small. Definitions of acceptable follicle size and style are vague and often simply a subjective opinion of the tanner or buyer. Markets vary in their requirements so clearly defined classifications need developing to suit different uses; classifications based on things like follicle size, skin size, thickness, whether a mature skin from a cull breeder or from a prime slaughter bird.

Tanneries report significant variations in quality of skins between farmers, with many having a poor structure that does not tan easily.

With the same grading criterion applied to all classes, the price differential will be market driven and determined by the skill of the marketers to identify new markets and develop demand. The development of the classes will be an evolving process.

A grading standard for finished and crust ostrich leather will reflect its cutting value. It further assists buyers to purchase the quality of leather that is required for the manufacture of a specific product.

Grading is required to set producer payment as well as finished leather prices.
1. Finished Skins: Tannery for buyer
2. Graded Crust: Tannery to pay Farmer or buyer purchasing crust skins
3. Graded Green: Tannery to pay Farmer or Trader
4. Graded Green: Trader to pay Farmer
Note: 1 and 2 use same standards.

The following are the general definitions for all grading systems.
General Definitions for all Grading Systems

1. The skin
The crown is the area with quill markings on the skin, excluding the neck area down to the wing folds as well as the flank areas.

For grading purposes divide the crown area into four quarters as displayed on the ostrich skin diagram – Figure 1

The vertical line “A-B” on the diagram will stretch from the base of the neck between the wing folds, down to the bottom of the crown. The horizontal line “C-D” on the diagram will stretch between the widest quill markings on either side of the crown area.

Unless requested otherwise by the buyer, cut skins according to Figure 2

2. Defects
Defects occur in various sizes with three sizes (circular) defined, namely 40, 80 and 120 mm in diameter.

A defect can be:
- Holes or cuts through the skin
- Scars and wounds (open or healed)
  A scar is any defect that disturbs the natural grain pattern.
- Scratches (open or healed)
  Scratches are the same as a scar and caused by sharp-edged objects like thorns.
- Loose scabs
  A partially healed wound that causes a distinctive disturbance of the natural grain layer
- Rough Surface (sunburn, chaffing, feather pecking, etc)
  A rough surface is open grain damage normally associated with scuffing and is not the same as sueding caused by bacterial decay.
- Loose grain (separation of grain layer from skin)
- Bacterial damage (open grain, sueded grain)
- Disease (rash, grown-in feathers, pit marks, marks from inoculation, etc)
- Tick bites
  Well-defined small holes +/- 1 mm in diameter, with swollen edges and usually occur behind a quill
- Wrinkles on the crown area are a defect if obvious.
- In general, all defects or blemishes, regardless of size or whether open or healed, will be taken in account for grading purposes as they do influence the value to the customer.
A healed wound that blends in with the surrounding natural grain pattern and is no larger than the distance between two quills is not a defect for grading purposes (it will not be prominent and is normally not the result of a large, deep wound).

Bacterial decay causes Pinholes (not hair follicles), and an extensive occurrence in at least two (or more) quarters will result in a down-grade of at least one grade.

3. Torn
A torn skin is a skin where the tear extends into the crown. This skin will be down-graded by one grade.

4. Opening Lines
Figure 1 shows the skin removed from the bird and the shape it should be. Figure 2 shows the cutting lines on the bird. The length of the upper flank “E” on the diagram - Figure 1 and the length of the lower flank “F” on the diagram must be equal. If the difference is obvious and affects the cutting value, it will be reason for a down-grade by one grade. This will apply to wrong opening lines in general.

5. Genetically caused defects
Grain definition that does not resemble what is normally associated with farmed ostriches will be regarded as a defect and taken into account for grading purposes

The occurrence of hair roots causes hair follicles, is natural and believed genetic in origin. An extensive occurrence of it in at least two (or more) quarters of the quill area will be a reason for a down-grade by one grade.

Vein marks are natural, but if they are obvious and cover a substantial area of the skin, it will be reason for a down-grade by one grade.

6. Quill development
A ripe feather, when harvested, will leave a full-bodied round quill; this is the ideal. Green feather quills tend to be opened/flat/prolonged. A sunken quill is the opposite of a green feather and is a quill with no body and a distinctive hole in the centre. Extensive occurrence of under-developed quills in more than two quarters will be reason for a down-grade by one grade.

7. Skin sizes
Areas of skins for different size groups are as follows:
- A+ = 156+ square decimetres
- A = 130 to 155 square decimetres
- B = 120 to 129 square decimetres
- C = 100 to 119 square decimetres
- D = 80 to 99 square decimetres

8. Trimming
Trim the neck through the distinctive line where the quill area ends and the more non-distinctive smooth area on the neck starts.

Trim the leg through the last distinctive line (10cm) above the middle of the knee.

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1 Research with full traceability of skins tracking back to breeder is required to verify genetic causes of these defects.
Figure 1 - Ostrich Skin Diagram
[source: SCOT, Mossel Bay, South Africa]
Tannery Grading – Finished Skins and Crust Skins

Super Premium
Virtually flawless hide with no visible defect to all four quarters or surrounding hide

Premium
All four quarters free of defect
The area outside the crown may have a few less visible defects

Grade One
At least three quarters must be free from any defects.
One defect, (excluding a hole), in any one of the quarters, if it is no larger than 40mm in diameter
Permitted: One healed wound no larger than the distance between two quills on the crown
Permitted: A small number of visible defects outside the crown area

Grade Two
At least two continuous quarters must be free from any defects
Permitted: One defect in any two adjacent quarters, if it is no larger than 80mm in diameter
Permitted: Two defects in any two adjacent quarters, if both are not larger than 40mm in diameter
Permitted: Two healed wounds no larger than the distance between three quills each on the crown area
Permitted: A few visible defects outside the crown area

Grade Three
At least one quarter must be free from defects
Permitted: One defect in any one of three quarters, if it is no larger than 120mm in diameter
Permitted: Two defects in any of the three quarters if one is no larger than 80mm in diameter and one is no larger than 40 mm in diameter.
Permitted: Three defects in any one of three quarters, if all of them are no larger than 40mm in diameter individually
Permitted: Three healed wounds no larger than the distance between four quills each on the crown area.
Permitted: A number of visible defects outside the crown area

Grade Four
A skin of which the grading falls outside the norm for a third grade skin, but where the affected crown area is no larger than 25% of the total crown area
The affected skin area should not be larger than 50% of the total skin area.

Grade Five
A skin of which the affected crown area is smaller than 50% of the total crown area
The affected skin area should not be larger than 50% of the total area

Lesser Grade
Any skin of which the defects are worse than those defined in Grade 5
Tannery Grading for Green Skins

The following applies to all grades for both Green Grading Systems:

Well cured (poor curing can be reason for downgrade or rejection)
Minimum and Maximum size determined by buyer, depending on market serviced
Correct opening lines as per Figure 2 unless buyer provides different instructions. Poor shape can result in downgrade or rejection
Mature Follicle Development (maybe reason for downgrade by one or two grades)
Skins free of “red heat” (Halophilic Bacteria)

Grade 1
All four quarters free of defect
Non Quill Area free of defects

Grade 2
At least three quarters must be free from any defects.
One defect, (excluding a hole), in any one of the quarters, if it is no larger than 40mm in diameter
Permitted: One healed wound no larger than the distance between two quills on the crown
Permitted: A small number of visible defects outside the crown area

Grade 3
At least two continuous quarters must be free from any defects
Permitted: One defect in any two adjacent quarters, if it is no larger than 80mm in diameter
Permitted: Two defects in any two adjacent quarters, if both are not larger than 40mm in diameter
Permitted: Two healed wounds no larger than the distance between three quills each on the crown area
Permitted: A few visible defects outside the crown area

Grade 4
All skins not complying with Grades I to 3

Trader Grading

Grade 1 – Top price
Reasonable condition with
No major defects
No holes
No feather pecking

Grade 2 – Low Price
Some Defects
No holes
No serious feather pecking

Grade 3/Reject – No Payment
Severe scaring
One or more holes
Not cut properly, poor shape
Feather pecked
## Summary

### Table 1 - Grading Summary – Tanned Skins

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Defect 4 Qtrs.</th>
<th>Defect 3 Qtrs.</th>
<th>Defect 2 Qtrs.</th>
<th>Defect 1 Qtr.</th>
<th>Defects Outside Crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Premium</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
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<tr>
<td>Premium</td>
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<td>MINOR</td>
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<tr>
<td>Grade #1</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>MINOR</td>
<td>MINOR</td>
</tr>
<tr>
<td>Grade #2</td>
<td>NONE</td>
<td>MINOR</td>
<td>MINOR</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>Grade #3</td>
<td>MINOR</td>
<td>MINOR</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Grade #4</td>
<td>Max 25% Crown Affected – no more than 50% total skin area</td>
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<tr>
<td>Grade #5</td>
<td>Max 50% Crown Affected – no more than 50% total skin area</td>
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<tr>
<td>Lesser Grade</td>
<td>Any skin worse than Grade 5</td>
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### Table 2 - Grading Summary – Green Skins

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Defect 4 Qtrs.</th>
<th>Defect 3 Qtrs.</th>
<th>Defect 2 Qtrs.</th>
<th>Defect 1 Qtr.</th>
<th>Defects Outside Crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade #1</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
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<td>NONE</td>
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<tr>
<td>Grade #2</td>
<td>NONE</td>
<td>NONE</td>
<td>NONE</td>
<td>MINOR</td>
<td>YES</td>
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<tr>
<td>Grade #3</td>
<td>MINOR</td>
<td>MINOR</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>Grade #4/Reject</td>
<td>All other skins</td>
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</tbody>
</table>

### Table 3 - Trader Grading

<table>
<thead>
<tr>
<th>GRADE</th>
<th>Defect 4 Qtrs.</th>
<th>Defect 3 Qtrs.</th>
<th>Defect 2 Qtrs.</th>
<th>Defect 1 Qtr.</th>
<th>Defects Outside Crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade #1</td>
<td>NO MAJOR DEFECTS</td>
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<tr>
<td>Grade #2</td>
<td>SOME DEFECTS – NO HOLES</td>
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<tr>
<td>Grade #3/Reject</td>
<td>All other skins</td>
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</tbody>
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