Measuring Improvement in Equine Welfare by using SEBWAT

Dr. V C Mishra
Sr. Welfare Assessor,
Brooke Hospital for Animals (India)
Preview

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About the Brooke

• The Brooke is an international animal welfare organization, dedicated to improving the lives of working equines in the poorest part of the world

• The Brooke is working in 11 different countries in Africa, Asia and Latin America

• Brooke India (BI) is an affiliate of Brooke UK and presently working in eight states of India.

Dorothy Brooke, founded the Brooke in 1934
Objective of the Study

• To prepare baseline about present status of equine welfare in Nanded District of Maharashtra (India)
• To identify major welfare issues prevailing in the area.
• Guide Brooke India (BI) field staff to prepare action plan with community on identified welfare issues
• To measure the impact of BI intervention.
Equine based welfare assessment indicators has been developed by the Brooke in collaboration with Bristol University, UK in 2002.

It is direct animal based measurement (include both behavioral and health indicators)

Equine based welfare assessment contains 54 observations.

The protocol meets the requirement for satisfactory welfare indicators listed by Sorensen et al. (2001)

- Express animal point of view, Express changes over time,
- Cheap and easy, Practical to field conditions etc
Standardized Equine Based Welfare Assessment Tool (SEBWAT):

- A standard protocol has been developed for welfare assessment of equines.
- A team of two trained members collect data; one as observer and other as recorder.
- This is a highly standardized tool:
  - It has proper and detailed guidance notes.
  - Assessors are highly standardized both for intra and inter observer standardization.
- Data entered in Brooke’s IMS (web based database) for analysis.
Observations:

A. Nine descriptors:

- Date (day/month/year)
- Time (24 hours)
- Observer (initials)
- Region ID (as given by UK)
- Animal ID (optional)
- Owner ID (optional)
- Work type (13 types); guidelines for multiple work types.
- Species (H,D,M).
- Sex (S, G, M).
B. Behavioral indicators:

• General attitude
  (Alert / Apathetic / Aggressive)

• Observer approach
  (Friendly/ avoidance)

• Chin contact
  (Receptive/ not receptive)

• Tail tuck
  (Fear response in donkeys only)
2. Health indicators:

- Body Condition Score  
  (1-5 scoring system)
- Mucous membrane  
  (Normal range/Pale/Dark)
- Wound on body parts  
  (Superficial/Deep lesion)
- Lip lesions  
  (Superficial/Deep lesion)
- Ectoparasites  
  (Bot eggs/Lice/Ticks)
- Sign of diarrhea  
  (Present/Absent)
- Pain response on spine  
  (Mild reaction/Strong reaction)
• Mutilation  
  *(Tail/Muzzle/Ear)*
• Firing lesions  
  *(Healed/Deep lesion)*
• Hobble wound,  
  *(Superficial/Deep lesion)*
• Swelling of tendon  
  *(No or Mild/Clear Swelling)*
• Hoof shape and quality  
  *(No or Mild/Clear abnormality)*
• Frog health  
  *(Normal/Diseased/Absent)*
• Gait examination  
  *(Moderate/Highly compromised)*
Sampling:

- Sampling done two levels
  - One at location i.e. village level. 50% intensive villages of Nanded district (N=4599) were randomly selected.
  - 5% animals were covered during the assessment

- Total 225 and 229 equines were assessed in 2010-11 and 2012-13 from the same villages respectively,

- For comparability, both the assessments had been conducted in same time of the year
• **Work Type:** Most of the animals (94.5 %) were used as TGP (Transportation of Goods by Pack).
Comparison of WA parameters:

- Apathetic: 16.5% (2010), 9.6% (2012)
- Sign of Diarrhoea: 15.3% (2010), 5.5% (2012)
- Ectoparasite: 30.6% (2010), 10.5% (2012)
- Body Wound (severe-2): 2% (2010), 1.7% (2012)
- Hobble lesion: 23.6% (2010), 1.1% (2012)
Cont....

[Bar chart showing percentages of abnormalities and BCS levels over years 2010 and 2012.]
Discussion:

- Most of the indicators showed improvement from baseline data which reflects effective intervention.

- Hobbling increased due to increase due to safety reasons.

- Behavior indicators reflects animal’s perception and their interaction with its environment including human – animal relationship.

- Brooke India’s working approaches:
  - Provides veterinary services to needy equines
  - Community mobilization
  - Influencing liaisoning and networking
Our activities:

Treating needy Equines
Community engagement (PRA, PWNA)
Cont...

Stakeholder’s Training
Conclusion:

- Positive changes in welfare indicators indicates some success of Brooke India intervention.

- Direct animal based measurement (welfare assessment tool) can measure the changes in welfare condition of equines over a period of time.

- Scoring system can be repeatable (Whay, 2003 and Leeb 2001).

- It is most relevant to animal itself.
Acknowledgement

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References:


Thank you