World's Poultry Science Association
Federation of European Branches

and

Institute of Poultry Diseases
Free University Berlin

Abstracts of
7th "Hafez" International Symposium
on
Turkey Production
Meeting of the Working Group 10 (Turkey) of WPSA

Berlin, Germany
May 30th – June 1st 2013

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The Animal Welfare Indicators (AWIN) project meets the stakeholders to ensure the acceptability of on-farm turkey welfare assessment

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The overall goal of the AWIN project is to improve animal welfare by developing, integrating and disseminating information about animal welfare indicators.

The research objectives to be carried out in 4 Workpackages will focus on sheep, goats, horses, donkeys and turkeys.

The WP1 aims to develop and refine welfare assessment protocols and optimize ways to integrate them in the production chain. Moreover, WP1 aims to develop a protocol to use epidemiological data collected at slaughterhouse and or health information to identify challenges to animal welfare.

A turkey expert group decided to focus on the development of indicators for intensive systems for growing turkeys. Moreover they decided that the birds should be evaluated 2 to 3 weeks before slaughter. With regard to the gender, which should be used for the evaluation of the turkey welfare, the experts agreed to consider both males and females in the evaluation. The reason for it was lack of clear evidence indicating in which of the genders the welfare problems would be more significant. The turkey group proposes a two-step action: a first step at the slaughterhouse and the second on commercial farms.

**STEP 1:**

The choice of the appropriated number of flocks would be done at the slaughterhouse according to the characteristic of turkey’s industries in each participating country. From each observed flock the following data will be collected: death on arrival, carcass weight, breast burns, footpad lesions, condemnations/down-grading information. The distribution of the collected data from the slaughterhouse evaluation will indicate the number of farms to be chosen as the extremes of the curve: the best farms (less death on arrival-carcass weight-breast burns-footpad lesions-condemnations/down-grading) and the worst one.
STEP 2:
Many indicators found in the literature were considered and discussed by the
turkey expert, as well as the implementation of the prototype with such
indicators in practical conditions on turkey farms. In addition most of such
indicators were never tested for validity, feasibility and reliability. The turkey
group decided to take an innovative approach of on farm evaluations, which
could be feasible, well accepted by the farmers (understandable and including
no animal handling), less time consuming than previous examples, but at the
same time effective strict and objective as the previous developed protocols that
demand massive amounts of time.

The turkey group members came to a consensus in using a transect approach
for the on farm evaluations. Turkey flocks are comprised of several thousand
birds that, like other meat poultry, may vary tremendously on their welfare level.
The choice of assessing the effectiveness of the transect methodology for on
farm application, was based primarily on the potential of this methodology to be
a valid, effective, and precise to provide a reliable evaluation of critical welfare
issues common in meat poultry such as the incidence of leg problems,
immobility and injuries.

The line transect methodology has successfully used in wildlife studies for
decades. For animal welfare assessment it is applied as divided walking paths
covering the full area of the production house. The procedure is to a certain
extend similar to the daily farm animal care routine. Depending on the width of
the house, the production area is divided in around 2.5m wide bands limited by
the walls, feeder and drinker lines, creating invisible birds movement barriers.
Transects are performed in random order alternately in both directions. The
observers walk slowly recording in a tablet all incidences of following validated
welfare indicators: immobile, limping, dirty, sick, agonizing and dead, all clearly
identifiable during data collection. Percentage of incidence of each condition per
transect is calculated by dividing the total population size by the number of
transects, assuming a random bird distribution. This procedure is envisioned as
a general assessment procedure for the most common welfare issues in meat
poultry and as a practical tool for management purposes.

The authors wish to thank the EU VII Framework programme for funding AWIN
Project (n. 266213 FP7-KBEE-2010-4)