Course Announcement:
"Computation of Random and Fixed Effects in Animal Breeding with PEST"

March 10–14, 2008 at Mariensee, Germany

On March 10–14, 2008 an international course on the "Computation of random and fixed effects in animal breeding with PEST" (PhD-Program of the University of Veterinary Medicine Hannover, Germany, course number 4252) will be held at the Institute of Animal Genetics, FLI, Mariensee, Germany.

Aim and Content: The course will be split between lectures and hands on work on real life datasets. The students will be put in the position to critically use PEST for analyses and genetic evaluations. In particular, emphasis will be placed on issues that may lead to wrong results which may easily go undetected. Here, convergence problems are of prime interest. The starting point is the matrix notation and the setup of constituent matrices leading to least squares solutions. After going through the command structure of PEST iterative and direct solving strategies and their combinations are delt with. Expansion from fixed to mixed models follow with the inclusion of different genetical models along with pedigree information. Features of BLUE and BLUP are discussed. This is followed by multivariate models, missing values and the computation of aggregate genotypes. Time permitting hypothesis testing in mixed linear models will also be touched upon.

Organizational Issues: The course will be taught in English and concluded with a written test. Admission will be through first come first serve with a maximum of 20.

Preconditions: basics of matrix algebra, linear statistical models, data manipulation; need to know what a command line is.

Venue: the course will take place at the Institute of Animal Genetics in Mariensee (35 km from Hannover). A limited number of rooms are available at the Institute, others in closeby hotels.

Instructor: The course will be taught by Eildert Groeneveld.

Registration: inge.steppuhn@fli.bund.de and eildert.groeneveld@fli.bund.de no later than February 5th.