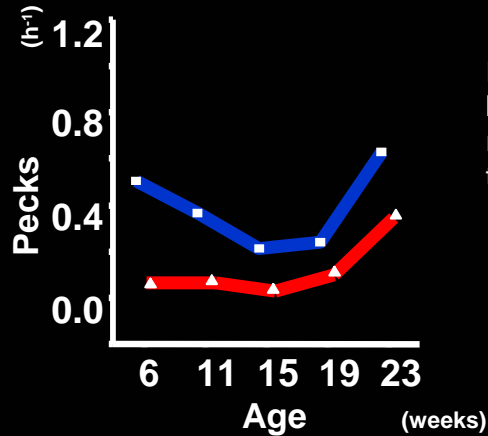


This leaflet was based on a master thesis, the final essay of the Masters Programme of Applied Biology, IFM, Linköpings University

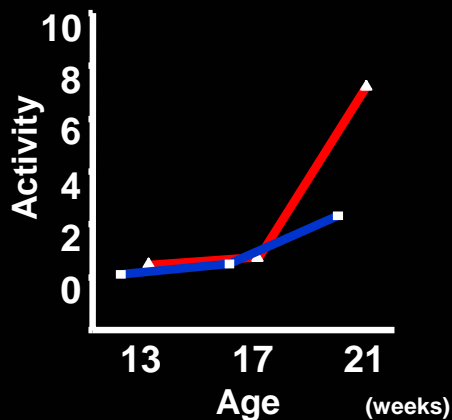
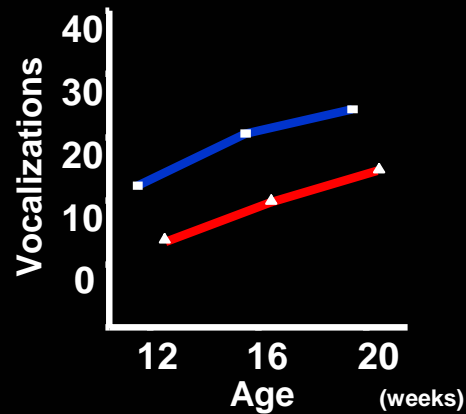
Black or White

And the risk of being pecked



Real-time observations in the home-boxes confirms that **black birds** received more severely feather pecks than **white birds**.

Black birds vocalized more in an open-field arena. This estimates how urgent it is to get in contact with flock mates.

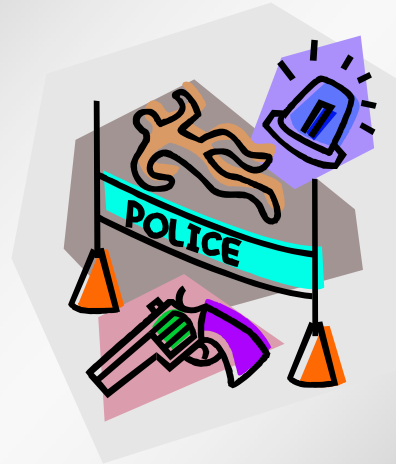


White birds were suddenly, at 21 weeks of age, more active. Chickens enter sexual maturation at around 20 weeks of age, which suggests that there is a difference in the pre-laying behaviour.





Feather pecking is a major welfare problem in the poultry industry. It often results in bleeding wounds that reinforce cannibalistic behaviours and eventually could cause the death of the victim. Large flocks is usually an enhancing factor. Today most chicken producers keep flocks of tens of thousands of birds.



PMEL17 codes for a protein that is necessary for the expression of the black pigment melanin. Birds without a functional *PMEL17* gene therefore have white plumage, while those that carry functional genes have black.



Research have shown that a single gene, called *PMEL17*, have large influence on determining the victims of feather pecking.

In this study I have shown that the *PMEL17* gene effects behaviour. Black birds were more severely pecked and behaved differently then white birds.

