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GROWTH PROHIBITING SUBSTANCES AND EFFECTS ON
GRASSLAND AREAS

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Growth prohibiting substances and effects on grassland areas

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At first we have to make the following assumption which can be proved:

- long grass areas are not so rich in birds as short grass areas -
- the grassland must be mowed once the year in order to hold those areas in a healthy form -
- Flight Safety demands grass should be not too long and dry because of burning danger -

We had to develop a method to reach the aims demanded:

- reducing birds and mowing as well as avoiding burning danger -

In special experiments we tested out various growth prohibiting substances in different mixtures on areas of 2.5 x 10 m (picture 1) and under different soil conditions:

- Field I : dry, sandy with a high part of short growing grass species -
- Field II: wet, with vegetable mould and with a high part of long growing grass-species -
- Field III: moist, with vegetable mould and a high part of long growing grass-species.

The measuring program was the following: first measurement of leaf-lengths before spraying out substances in may, second measurement in july and than every 14 days.

The results you can take from pictures 2,3,4. The thin line shows the values from control areas, the thick line the values from testing areas. You can see a remarkable effect on all areas but this effect is better on short growing grass than on long growing species; the effect is better the dryer the ground is.

This type of experiments is going on in various airfields with the aim to test out these substances also in mixtures with various herbicides under special climatological, vegetational and soil conditions in various areas of Germany and with different concentrations.

Using such substances requires special ecological research before. By this method it will be possible to reach optimal grass-lengths during

vegetation period and to mow once the year in autumn or spring time; but depending on soil and grass -species you have to renounce spraying in order to reach a vegetative recovery of the short growing grass - species.