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Short Communications

Short note on the distribution and abundance of *Anguillicola* in The Netherlands

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Summary

This short note presents data on the distribution of *Anguillicola* in The Netherlands on the basis of a study performed in 1986.

Zusammenfassung

Kurze Mitteilung über die Verbreitung und Häufigkeit von Anguillicola in den Niederlanden
Diese Kurzmitteilung beschreibt die Verbreitung von *Anguillicola* in den Niederlanden aufgrund einer Untersuchung, die im Jahre 1986 durchgeführt wurde.

Résumé

Note sur la distribution et la fréquence de Anguillicola dans les Pays Bas
Ce note présente des données d'une relève de *Anguillicola* dans les Pays Bas.

This short note presents some preliminary results from a sampling program in The Netherlands during 1986, for *Anguillicola crassa*, a swimbladder parasite of the European eel, *Anguilla anguilla*.

Eel samples taken during regular market sampling and covering 23 eel catching areas, were scored on the number of *Anguillicola* in the swimbladder detectable to the naked eye. Each sample comprised 5 to 10 kg of eels.

Four different indicators of infection were calculated: (1) percentage of animals infected; (2) percentage of animals infected by more than 20 parasites; (3) geometric mean of number of parasites per animal; (4) geometric mean of number of parasites per parasitized animal. These four indicators were compared in pairs, giving correlation coefficients as listed in Table 1.

Table 1. *Anguillicola* infections in eels in The Netherlands. Calculated correlations between various indicators of severity of infection. (1) percentage of animals infected (2) percent of eels infected with more than 20 parasites; (3) geometric mean of parasites per eel; (4) total number of fish examined

Indicator ▼	1	2	3
2	0.14	—	—
3	0.93	0.22	—
4	0.63	0.29	0.62

percentage infection in each area is indicated. Two uninfected samples were found, both stemming from small (< 50 ha) waters with a limited and barred connection to other waters.

From this correlation table, it was concluded that the relative rate of infected animals in all samples is closely related to the percentage of eels carrying more than 20 parasites. It is assumed that these parameters most probably reflect the underlying phenomenon. Therefore, in Figure 1, the distribution of samples in The Netherlands is presented and the

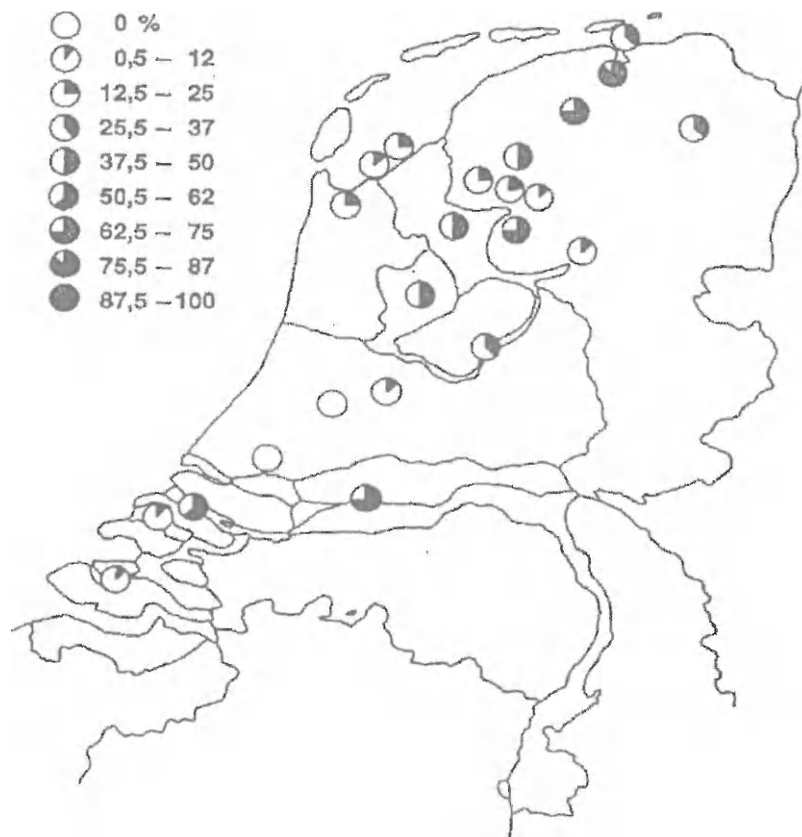


Fig. 1. Distribution of *Anguillicola* in The Netherlands in 1986, showing the percentage of eels in each sample that were infected

From Figure 1, it can also be seen that infected fish are now found throughout The Netherlands. However, the distribution is rather patchy. Samples from salt and brackish waters always show a lower infection rate than those taken from neighboring fresh water areas. Moreover, field observations indicate that the infected animals caught in brackish or sea water may originate from fresh water areas.

References

KOOPS, H.; HARTMANN, F.: *Anguillicola* - infestations in Germany and in German eel imports. J. Appl. Ichthyol. (P. 41, this volume).

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