

Figure 6. Breeding distribution of Redshank in France (from Dubois & Mahéo 1986)

son is possibly a reason for the high mortality of young Redshanks.

## References

Annezo, J.P. et al. 1978. Notes d'ornithologie bretonne. Bull. liais Ar Vran 17.

- Blanchon, J.J. & Dubois, P. 1982. Détermination des zones écologiques sensibles par l'étude de l'avifaune en marais poitevin. L.P.O et P.N.R. Marais Poitevin, Val de Sèvre et Vendée.
- Blondel, J. & Isenmann, P. 1981. Les oiseaux de Camargue. Delachaux et Nestlé, Neuchatel.
- Dubois, P.J. & Maheo, R. 1986. Limicoles Nicheurs de France. Ministère de l'Environement, IWRB, LPO.
- Kempf, C. 1976. Oiseaux d'Alsace. Istra, Strasbourg.
- Kérautret, L. 1969. Notes sur l'avifaune de la zone humide de Pierrepont-Sissonne (Laonnois-Aisne). *Alauda* 37: 37-42.
- Perthuis, A. 1976. Actualités ornithologiques, période du 1er janvier 1972 au 15 novembre 1975 (région Centre). Bull. Nat. Orléan. III/19: 3-18.
- Perthuis, A. 1981. Répartition et effectifs des limicoles nicheurs de la région Centre. 2e partie: genre *Charadrius, Vanellus* et *Himantopus. Bull. Nat. Orléan.* III/33: 51-56.
- Spitz, F. 1961. Esquisse du statut des limicoles nicheurs en France. Oiseaux de France 33: 26-31.
- Spitz, 1964a. Notes sur l'avifaune nicheuse de la région de St. Michel-en-l'Herm (Vendée). *L'Oiseau et R.F.O.* 34: 51-67.
- Spitz, F. 1964b. Premiers résultats de l'enquête sur la nidification du Vanneau huppé Vanellus vanellus en France. Oiseaux de France 41: 17-23.
- Trolliet, B. & Ibanez, F. 1990. Les effectifs de la Barge à queue noire *Limosa limosa* nicheuse en Vendée. *L'Oiseau et RFO* 60: 207-211.

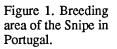
## Snipe on Wet Grasslands in Portugal

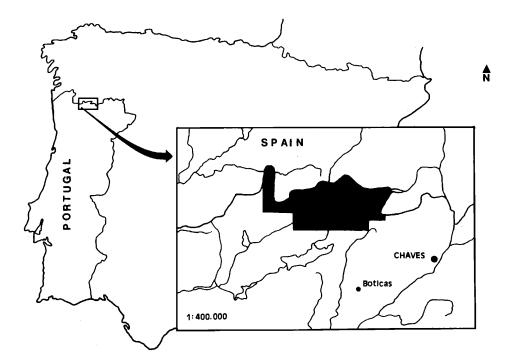
## Rui Rufino & Renato Neves

Rufino, R. & Neves, R. 1991. Snipe on Wet Grasslands in Portugal. Wader Study Group Bulletin 61, Supplement: 31-32.

Rui Rufino & Renato Neves, CEMPA/SNPRCN - R. Filipe Folque 46, 5º, 1000 Lisboa, Portugal.

Most of the grasslands in Portugal are dry, at least during the summer months. The Mediterranean influence on our climate is significant and gives wet, mild winters and dry, hot summers. Although this is true in most of the country there are, however, some exceptions. The northern uplands, due to the predominance of the Atlantic influence, have a much wetter and cooler climate. The area of interest for wet grasslands is in northern Portugal (Figure 1). It lies mostly above 900 m and has an average annual temperature of ca. 10° C and an average annual rainfall ranging from 1400 mm to 1600 mm. In these uplands wet grasslands can be found in many of the valleys. They are kept wet throughout most of the year by means of a network of ditches which distribute either the





rain-water or the water from a nearby stream. Irrigation is also used in winter to avoid frost damage to the hay.

Grasslands which dry out in late spring are then cultivated, with potatoes and maize, whereas grasslands at the bottom of the valleys, which remain wet, or dry out only in July / August are not cultivated at all. However, all these grasslands are mown either once or several times a year. If mown only once, this occurs in late spring or early summer (July / August). Snipes Gallinago gallinago normally breed on wetter grasslands. This species is known to have bred in Portugal since 1918 (Reis Jr. 1924), and was more recently reported on by Santos Jr. (1979) and Rufino (1989).

The area was extensively surveyed in 1984 and 1986 and the breeding population of Snipe was estimated at roughly 100/150 pairs. Breeding densities are thought to be very low. Figure 1 shows the area from which there is evidence of breeding. This Snipe population, whose range is restricted to this area and to the adjacent Galician grounds (Spain), is isolated from the rest of the European breeding population. The maintenance of these breeding grounds is highly dependent on a low intensity of agricultural practices. The agricultural revenue of these areas is low and supports a population of mainly elderly people. The intensification of the agricultural practices, based on drainage of the grasslands, is a potential threat to this upland breeding population of the Snipe.

Intensive surveys are needed to establish the size of the population of this species, its distribution and its habitat preferences. It will then be possible to promote effective management and conservation measures.

## References

- Reis Jr., 1924. Notas Ornitologicas A reproducao em Portugal de *Gallinago gallinago* (Lin.). Anais do Instituto de Zoologia da Universidade do Porto, pp 35-39.
- Santos Jr., J.R., 1979. As narcejas e a sua criacao em Tras-os-Montes. *Cyanopica* I (2): 1-14.
- Rufino, R. (Coord.), 1989. Atlas das Aves que Nidificam em Portugal Continental. Publ. CEM-PA/SNPRCN, Lisboa.