

Galicia is green „with mad cows“ due to the more luxurious „ryegrass pastures“?

The best Spanish beef and **dairy products are usually said to come from Galicia , which has a climate and greenery like Ireland 's, and the uplands of the Catalan province of Girona , also relatively lush.** Some people claim that the best beef comes from the Tudanca breed, found almost exclusively in the verdant Cabuérniga and Nansa Valleys in the Cantabrian mountains. Others still lay claim to the meat of Avileña negra ibérica, a hardy breed from the mountains of the Sistema Central in Castile.. (<http://www.iberianature.com/material/cows.html>).

On 22nd November 2000, the then-PP government announced the **first two cases of BSE** in Spain: a cow named Parrula from a farm in Lugo, and another named Elvira in La Coruña (**province Galicia**). A month earlier, the government had proclaimed Spain safe from the disease. **The result was nationwide hysteria whipped up by the mass media and a huge drop in beef sales.**

The Spanish government now stands accused of delaying tactics. The first Spanish cow reported with BSE symptoms was **“Elvira,” which died in August 2000.** By October, the government knew it had been affected by BSE but did not confirm this until December. The family who owned the cow has accused the regional government in Galicia of having pressurised them for at least two months to keep quiet about the case.

Forty-three animals infected with BSE, or “Mad Cow Disease,” have so far been registered in Spain- until 7 May 2001 (SHORT, 2001). According to official information provided by the department of agriculture and fisheries, 33 of these (**77 percent !**) **were concentrated in the north-west area of Galicia.** The others are in Asturias/Basque Country (6 cases), Barcelona (2) and the Balearic Islands (2). The cases were reported between November 22, 2000 and April 3 this year (2001).

Some experts believe that the number of BSE cases in Spain will rise to more than 250 by the end of this year. The most conservative assumptions predict that there will be a minimum of 3,500 cases in the course of this decade. However these predictions are based on the present level of known infections, which is about one positive case per thousand animals tested (<http://www.wsws.org/articles/2001/may2001/beef-m07.shtml>).

Spain is divided into 17 autonomous regions, making the co-ordination of the anti-BSE measures and controlling the epidemic extremely difficult. The crisis has already claimed several political scalps. **Castor Gago, Agriculture Secretary in Galicia,** resigned after it emerged that the regional government was throwing diseased carcasses down a mineshaft, instead of disposing of them properly. Farmers have blocked slaughterhouses and meat packing plants across Spain to protest against the lack of government help to deal with BSE.

Spain is still the lowest *per capita* consumer of beef in the EU. This is no doubt partly due to the tradition and quality of pork products and lamb, but also because of the inferiority of some of its beef production: most animals are industrially-raised and fed, and have very little opportunity to develop muscle fibre, being confined to cattle sheds their whole lives.

Cows affected by BSE in Spain 2000-2006 (until 10 August 2006), number of cases; 2000- 3 cases, 2001- 82 cases, 2002- 127 cases, 2003- 167 cases, 2004 137 cases, 2005- 98 cases, 2006- 41 cases; Total: 655 cases of BSE . **More than one third of the BSE cases was found in Galicia...** This province covers only 5.8 percent of Spain's total surface and is located in Northwest Spain, with the 7.5 percent of the Spanish population. Annual mean temperatures vary from 8.3oC in the highest altitudes inland to 16oC in the southwestern coast. The average **farm is very small with a total of 6.2 hectares made up of an average of 15.2 separate plots.** Only 10.6 percent of the farms are over 10 ha. Annual rainfall varies between 700 to more than 2000 mm.

However, rainfall and the available water capacity of the soil are major yield determinants, with output in the U.K., for example ranging from 6000- 14000 kg DM/ha under intensive fertilization. However, there are notable exceptions such as Benelux , which although characterized by the highest pasture yields in Europe, has a comparatively low share of grassland in total ruminant feed composition (50- 55%) – compared with Ireland (97%), U.K. (83%), France (71%). The permanent grazings of the **Mediterranean zone** are subject to severe moisture stress with annual production being limited to about 1000 kg DM/ ha. However, in this **climatic zone, irrigated legume and legume/ grass swards are capable of outputs of 20000 kg DM/ ha** (LEE, 1988).

In contrast to Dry Spain, Galicia is green due to the more luxurious pastures, which account for 11.1 percent of the total area (permanent pastures- 63 percent; sown mixtures of grasses and clovers- 37 percent). Data from 1580 dairy farms of the Dairy Management Programme of the Regional Ministry of Agriculture, with an average size of 23.2 cows, showed that the milk from forages was low as 20.9 percent in 1996, as a consequence of feeding 2035 kg of concentrates per cow yielding 5652 kg of milk per year. **Italian and perennial ryegrasses represented 91.3 percent** of the Spanish seed market in the period 1993- 1997 of pasture species eligible for sowing **pastures in Galicia.** The average Galician farm applies 82 kg/ha of nitrogen (N), that rely more on grass than on grass- clover swards. In most situations , where N applications of around 250 kg/ha or over were used, the clover disappeared...

However, there is the **similarity with conditions** in the UK and Ireland. So, also **in Galicia can be the origin of BSE according to the alternative „ammonia- magnesium theory“** (see Chapter; The origin of BSE according to the alternative „ammonia- magnesium theory“).

There also is the similarity about the **highest BSE incidence in Europe-** see 2004; 2005; and 2006 years; UK; 398, 224 and 86 cases; Spain; 137, 98 and 41 cases; Ireland; 126, 69 and 30 cases of BSE (<http://home.hetnet.nl/~mad.cow/>).

The scientific magazine Brain Research recently published (September 2005) the results of research work by **scientists José Luis Velayos and Francisco José Moleres from the University of Navarra** (Department of Anatomy). The work describes the presence and location of the cellular prion protein (PrPC) in the brain of the rat and characterises the neurones expressed therein, above all within the cerebral cortex of this rodent. These authors found that the presence of the cellular isoform in a subset of **GABAergic neurons**

containing calcium-binding proteins suggests that PrP(C) plays a role in the metabolism of calcium. The lack of immunostaining in neurons ensheathed by perineuronal nets indicates that prions do not directly interact with components of these nets. The destruction of these nets is more likely to be the consequence of a factor needed for prions during the early stages of TSEs. This would cause destruction of these nets and death of the surrounded neurons. Their results support the view that destruction of this extracellular matrix is caused by the pathogenic effect of prions and not a primary event in TSEs (VELAYOS and MOLERES, 2005).

Even the few controls that were introduced in Spain regarding the use of animal feeds containing **meat and bone meal (MBM) products were not enforced.** Similarly, the ban on imported cattle from Portugal, where BSE had become more widespread, was being broken in hundreds of ways. The border between Spain and Portugal is 1,215 kilometres long, it comprises an extensive territory marked often only by posts. **Spanish abattoirs are used to slaughter many Portuguese cattle.** Some Spanish farmers buy land in Portugal for their cattle to graze, because they enjoy better subsidies and other fiscal advantages there. Many have admitted they bought animal feed in Portugal, since it was much cheaper there.

Once the cases of BSE could no longer be hidden, the Spanish government said it would finance 40 percent of the emergency measures, seek EU funding to match its contribution, and ask the regional administrations to foot 15 percent of the bill, with farmers contributing the remaining 5 percent. However, it has levied a special tax on all meat products—not just beef—to pay the estimated **60 billion pesetas (\$321 million) cost of dealing with the outbreak of BSE.**

Unsurprisingly, Spanish beef consumption has fallen even further since the Mad Cow Crisis.. While Spain is considered as a low risk area for Mad Cow's disease, there is some cause for concern. Cases increased from 118 in 2002 to 167 in 2003. In 2004 decreased to 137, in 2005 to 98 and to 41 in 2006 (updated 10 August 2006) (<http://home.hetnet.nl/~mad.cow/>). There is as yet no recorded case of human vCJD in Spain .

New EU laws to prevent new outbreaks of BSE mean that dead livestock can no longer be left abandoned in the countryside. This appears to have led to increased attacks by Spanish wolves on livestock, which has increased tensions in some areas. There is a growing tendency to set up feeding stations for vultures to combat the catastrophic loss of carrion....

References

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SHORT,V.: "Mad Cow Disease" spreading in Spain. World Socialist Web Site, 7 May 2001

Statistics about the BSE are available at address; (<http://home.hetnet.nl/~mad.cow/>)

Updated ; 10 August 2006

BSE in Europe	Confirmed cases				
	2003	2004	2005	2006	Total since 1987
United Kingdom <a>[a]	611	398	224*	86*	182683
Great Britain [b]	549	308	201	59	179841
Northern Ireland [a]	62	34	17	-	2147
Isle of Man <a>[a]	0	0	0	-	437
Jersey [a]	0	0	0	-	149
Guernsey [a]	0	0	0	-	699
Austria	0	0	1	2	5
Belgium[c]	15	11	2	1	132
Cyprus	0	0	0	0	0
<u>Czech Republic</u>	4	7	8	1	24
Croatia	0	0	0	0	0
<u>Denmark</u> [d]	2	1	1	0	15
Estonia	0	0	0	0	0
Finland ^[fi]	0	0	0	0	1
France- ^[e]	137	54	31	3	981
<u>Germany</u> - ^[k]	54	65	32	10	405
Greece- ^[gr]	0	0	0	0	1
Ireland- ^[f]	182	126	69	30	1577
<u>Italy</u> - ^[it]	31	7	8	2	136
Latvia	0	0	0	0	0

Liechtenstein	0	0	0	0	2
Lithuania	0	0	0	0	0
Luxembourg	0	0	1	0	3
Malta	0	0	0	0	0
Netherlands-[g]	19	6	3	2	82
Norway	0	0	0	0	0
Portugal [h]	133	92	51	18*	1016
<u>Poland [p]</u>	5	11	20	9*	49
Slovakia	2	7	2	0	20
Slovenia	1	2	1**	0	6
<u>Spain-[i]</u>	167	137	98	41*	654
Sweden <u>[s]</u>	0	0	0	1	1
Switzerland [j]	21	3	3	2	464
Ukraine <u>[u] *)</u>	0	0	0	0	0

BSE outside Europe

<u>Canada</u>	1	1	1	4	8
Falkland Islands	0	0	0	-	1
<u>Israel</u>	0	0	0	-	1
<u>Japan</u>	4	5	7	7	29
Kuwait <u>[v]</u>	0	0	0	-	0
Oman	0	0	0	-	2
United States of America	1	0	1	1	3

BSE in Spain 2006 ; updated 25 July 2006

Nr	Place of detection			date of detection	birth date	race
2006/01	Castilla-León	Burgos	Ibeas	05-01-2006	17-06-1998	Mestiza
2006/02	Navarra	Navarra	Ultzama	04-01-	25-08-	Frisona

				2006	2000	
2006/03	Valencia	Castellón	Torre d'Emborsora	19-01-2006	05-12-1997	Lidia
2006/4	Cataluña	Lleida	Pla d'Urgell	19-01-2006	01-03-1996	Frisona
2006/5	Castilla-León	León	Valencia de Don Juan	30/01/2006	22/10/1998	Frisona
2006/6	Galicia	A Coruña	Vimianzo	30/01/2006	05/06/2000	Frisona
2006/7	Galicia	Pontevedra	Vila de Cruces	30/01/2006	28/06/1998	Frisona
2006/8	Castilla-León	Avila	Horcajo de las Torres	10/02/2006	01/01/1996	Parda
2006/9	Exremadura	Cáceres	Brozas	06/02/2006	01/06/1998	Limusina
2006/10	Galicia	Lugo	Lugo	23/02/2006	24/05/1998	Frisona
2006/11	Galicia	Pontevedra	Lalín	23/02/2006	11/06/2000	Frisona
2006/12	Cataluña	Gerona	Sant Aniol de Finistres	23/02/2006	22/10/1997	Frisona
2006/13	Navarra	Navarra	Uharte-Araki	16/02/2006	30/07/2000	Pirinaica
2006/14	Castilla-León	Burgos	Valle de Mena	02/03/2006	01/10/1996	Charolesa
2006/15	Galicia	Pontevedra	Agolada	09/03/2006	06/07/1999	Frisona
2006/16	Galicia	Pontevedra	Donzón	09/03/2006	02/03/2000	Frisona
2006/17	Baleares	Menorca	Mao	02/02/2006	08/09/1998	Frisona
2006/18	Castilla-León	Palencia	Villaumbrales	23/03/2006	04/03/1998	Frisona
2006/19	Galicia	Lugo	A Pontenova	13/03/2006	01/06/1999	Frisona
2006/20	Galicia	Lugo	Castroverde	03/04/2006	30/08/1997	-
2006/21	Galicia	Orense	Viana do Bolo	24/04/2006	08/01/1999	-
2006/22	Galicia	Lugo	Palas del Rey	24/04/2006	28/11/1998	-
2006/23	Asturias	Asturias	Cangas de Onís	04/05/2006	02/08/1999	Frisona
2006/24	Cataluña	Lleida	La Seu d'Urgell	09/05/2006	13/06/2000	Frisona
2006/25	Galicia	A Coruña	Cesuras	10/05/2006	19/06/1999	Frisona
2006/26	Galicia	A Coruña	Vimianzo	10/05/2006	18/01/2001	Frisona
2006/27	Galicia	Lugo	Meira	23/05/2006	25/12/1999	Frisona
2006/28	Cataluña	Girona	Serinya	25/05/2006	14/08/1997	Parda
2006/29	Canarias	Las Palmas	Teror	25/05/2006	13/06/2000	Canaria
2006/30	Andalucía	Jaén	Jaén	26/05/2006	23/07/1999	-
2006/31	Galicia	Lugo	Trabada	26/05/2006	05/03/1998	-
2006/32	Castilla-León	León	Villaturiel	21/04/2006	23/03/1999	-
2006/33	Galicia	Lugo	Guitiriz	31/05/2006	30/08/1995	-
2006/34	Asturias	Asturias	Villayon	02/06/2006	01/05/2000	-
2006/35	Castilla-León	Salamanca	Villaflores	31/05/2006	01/12/1997	-
2006/36	La Rioja	La Rioja	Aguilar del Río Alhama	19/06/2006	10/01/2000	-
2006/37	Galicia	A Coruña	Tordoia	21/06/2006	11/02/1999	-

2006/38	Galicia	Pontevedra	Rodeiro	03/07/2006	03/07/2000	-
2006/39	Galicia	Lugo	A Pastoriza	03/07/2006	03/08/2000	-