keds are transferred to the lambs. The older keds on the ewes gradually die off as a result of infection with *Trypanosoma melophagium*[3]. These conclusions were drawn from observations that no puparia appeared on lambs until the latter were 4–6 weeks old, and that all keds seen on lambs up to four weeks of age were small ones. Bequaert[4] has summarized the work of other authors, and claims that the ked deposits its first offspring in 14–30 days after it has emerged. On 10 lambs examined at Lethbridge, there were found an average of 11·6 ± 6·53 keds and no puparia on lambs two weeks of age, 43·3 ± 23·2 keds and 1·5 ± 1·8 puparia at four weeks of age, and 137·3 ± 59·84 keds and 25·5 ± 18·34 puparia at six weeks of age.

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Effect of Age of Young Dairy Calves on Dry-Matter Digestibility of Alfalfa Pellets

Successful attempts to rear dairy calves on high-quality forage (dry-matter digestibility more than 70 per cent) without grain feeding have been reported by McCullough *et al.*[1], McMeekan[2] and Roy *et al.*[3]. Utilizing similar forage, Preston *et al.*[4] investigated the effect of age on digestibility and intake with calves 3–9 weeks old. Their findings suggested that: "(*a*) rumen development is anatomical; (*b*) the development of microflora—in respect of their ability to ferment and digest grass dry matter—is instantaneous or practically so, and is dependent on there being a suitable substrate in the rumen".

Since all previous work with young calves had been done with highly digestible forage, it seemed desirable to determine the apparent effect of age on the digestibility of a lower-quality forage. Four Guernsey calves were fed whole milk at 10 per cent of birth weight and alfalfa meal pellets free choice from birth to 12 weeks of age. Morrison[5] lists the *TDN* of similar alfalfa as 57 per cent. Dry-matter digestibility was determined from grab samples at weekly intervals from 6 to 12 weeks of age. Previous work by Kane *et al.*[6] and Cook *et al.*[7] had shown the chromogen technique[8] to be suitable for similar hays, and the work of Preston *et al.*[4] had indicated that milk fed simultaneously with forage did not affect the digestion of grass. The pellets were unpalatable to the calves and intake was low until the calves were 10–12 weeks of age. The mean intake was 7 lb. whole milk and 2·0 lb. of pellets.

Table 1. Dry-Matter Digestibility of Forage and Average Daily Gain of Calves

Item	Calf No.	Week of age						
		6	7	8	9	10	11	12
Dry-matter digestibility (per cent)	1	53	54	55	53	53	57	55
	2	53	53	55	55	56	55	57
	3	53	57	54	55	56	56	53
	4	53	54	54	57	54	55	55
Average digestibility (per cent)		53	55	55	55	55	56	55
Average daily gain (lb.)		0·6	0·7	0·2	0·0	1·3	0·9	1·4

Average dry-matter digestibilities and daily gains for the four calves are shown in Table 1.

The results seem to indicate little or no change in apparent dry-matter digestibility from 6 to 12 weeks. The improved rate of gain after 10 weeks corresponds with the observation that the calves were unable or unwilling to consume enough alfalfa pellets for good growth before this age. The results seem to agree with the observations of Preston[4] and emphasize the ability of the calf to utilize forage at a very early age.

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Sacculina gonoplaxae Guérin–Ganivet, 1911, a Rhizocephalan Parasite New to British Waters

Sacculina gonoplaxae Guérin–Ganivet, 1911, is a Rhizocephalan parasite on *Goneplax angulata* (Pennant) [= *Gonoplax rhomboides*, L.]. Full details of the taxonomy of the genera of the family Sacculinidae and of the species of the genus *Sacculina* are given by Boschma (1955)[1].

On April 29, 1957, a single specimen was found on a *Goneplax angulata*, taken from the stomach contents of a cod trawled in 50–57 fathoms (about 100 m.) approximately eight miles north-west of Bradda Head, Isle of Man. The host had a carapace breadth of 23 mm. Apparently digestion of the crab had not yet taken place, suggesting that it had been recently swallowed. The dimensions of the parasite were: larger diameter, 13 mm., smaller diameter, 7 mm.

Dr. R. B. Pike, of the Marine Station, Millport, Isle of Cumbrae, in a personal communication, informs me that he obtained a *Sacculina* on *Goneplax angulata* on November 3, 1955, which he had provisionally identified as *Sacculina gonoplaxae*. This specimen was collected by Mr. Latham, and was taken in the Fairlie Channel, Firth of Clyde, in about 30–40 m. Dr. Pike's specimen conformed to the following measurements: width of the carapace of *Goneplax angulata* (host), 19 mm.; greatest width of parasite, 12 mm.

Both specimens were sent to Dr. Boschma, who identified them as *Sacculina gonoplaxae*.

Up to now, *Sacculina gonoplaxae* has been recorded from the Gulf of Cadiz, from off the Atlantic coast of Morocco, and from various localities in the Mediterranean. The distribution of the parasite can now be extended northwards to the Irish Sea and the Firth of Clyde.

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