1

00:00:00,000 --> 00:00:08,639

[Music]

2

00:00:06,399 --> 00:00:10,880

Dairy demonstration farm Mountjoy in

3

00:00:08,639 --> 00:00:13,120

Treffgarne, Pembrokeshire, has had considerable

4

00:00:10,880 --> 00:00:14,080

success in the use of selective dry cow

5

00:00:13,120 --> 00:00:16,240

therapy

6

00:00:14,080 --> 00:00:18,560

to improve udder health, as well as

7

00:00:16,240 --> 00:00:20,960

reducing the use of antibiotics. Let's

8

00:00:18,560 --> 00:00:23,760

see the steps and measures in management

9

00:00:20,960 --> 00:00:26,480

will Hannah and his team have undertaken

10

00:00:23,760 --> 00:00:29,279

to help them to use selective dry cow

11

00:00:26,480 --> 00:00:32,399

therapy successfully. In the

12

00:00:29,279 --> 00:00:35,200

lead-up to drying-off, we do a last milk

13

00:00:32,399 --> 00:00:38,079

recording say a month before dry-

14

00:00:35,200 --> 00:00:40,559

off, and that gives us then the

15

00:00:38,079 --> 00:00:43,120

cell counts of all the cows, and off that

16

00:00:40,559 --> 00:00:44,640

then we use the data to dry-off cows

17

00:00:43,120 --> 00:00:46,719

that have high cell counts which we

18

00:00:44,640 --> 00:00:48,640

want to give an antibiotic treatment to.

19

00:00:46,719 --> 00:00:51,199

This year, for instance, we've

20

00:00:48,640 --> 00:00:52,719

dried-off 42 cows that had cells above

21

00:00:51,199 --> 00:00:55,120

250

22

00:00:52,719 --> 00:00:55,990

parts per million. By doing that before

23

00:00:55,120 --> 00:00:57,199

dry-off,

24

00:00:55,990 --> 00:00:58,960

25

00:00:57,199 --> 00:01:01,280

it means that when we actually come

26

00:00:58,960 --> 00:01:03,680

to drying-off today, all we have to do

27

00:01:01,280 --> 00:01:06,320

is do the sealant treatment.

28

00:01:03,680 --> 00:01:07,840

We dried-off 38 cows

29

00:01:06,320 --> 00:01:10,560

out of the herd, which was a very similar

30

00:01:07,840 --> 00:01:12,400

number; the herd total number was similar.

31

00:01:10,560 --> 00:01:15,759

This year, we've done 42, so this year

32

00:01:12,400 --> 00:01:16,799

is marginally up on last year. I

33

00:01:15,759 --> 00:01:18,799

think actually the herd might actually be

34

00:01:16,799 --> 00:01:21,200

smaller this year. Last year, it worked out

35

00:01:18,799 --> 00:01:22,960

that 11% had antibiotic treatment,

36

00:01:21,200 --> 00:01:24,159

and this year 12.5%

37

00:01:22,960 --> 00:01:25,439

will have antibiotic

38

00:01:24,159 --> 00:01:26,799

treatment.

39

00:01:25,439 --> 00:01:28,960

It's interesting, because actually this

40

00:01:26,799 --> 00:01:32,400

year, we've run an average

41

00:01:28,960 --> 00:01:34,000

of 120 cells, whereas last year we ran

42

00:01:32,400 --> 00:01:35,920

at 145.

43

00:01:34,000 --> 00:01:37,360

This year looks better, and then we

44

00:01:35,920 --> 00:01:38,960

came to that final recording and there

45

00:01:37,360 --> 00:01:40,880

seemed to be a few more cows that

46

00:01:38,960 --> 00:01:42,479

were slightly higher. What

47

00:01:40,880 --> 00:01:44,159

about the number of clinical cases of

48

00:01:42,479 --> 00:01:46,320

mastitis

49

00:01:44,159 --> 00:01:48,799

year on year? How do they

50

00:01:46,320 --> 00:01:51,119

look? The clinical cases this year

51

00:01:48,799 --> 00:01:54,000

are distinctly lower. We've treated 18

52

00:01:51,119 --> 00:01:58,000

cows with antibiotic treatment this year

53

00:01:54,000 --> 00:01:59,680

for mastitis. Last year we treated 42,

54

00:01:58,000 --> 00:02:01,600

so there is a big difference there.

55

00:01:59,680 --> 00:02:02,479

56

00:02:01,600 --> 00:02:03,759

57

00:02:02,479 --> 00:02:05,840

It could be partly driven by the cow, but

58

00:02:03,759 --> 00:02:09,679

it's also partly driven by us

59

00:02:05,840 --> 00:02:11,520

using more anti-inflammatories and

60

00:02:09,679 --> 00:02:12,800

uddermint, for instance.

61

00:02:11,520 --> 00:02:14,720

There's probably at

62

00:02:12,800 --> 00:02:16,319

least 10 cows which would have had

63

00:02:14,720 --> 00:02:18,720

antibiotic last year, which this year

64

00:02:16,319 --> 00:02:21,599

we've persevered a bit more

65

00:02:18,720 --> 00:02:23,920

with the anti-inflammatory and

66

00:02:21,599 --> 00:02:25,200

uddermint, and it's worked to be fair;

67

00:02:23,920 --> 00:02:28,319

they're clearing up.

68

00:02:25,200 --> 00:02:30,319

To be fair,

69

00:02:28,319 --> 00:02:31,840

the stronger antibiotics, I suppose, are

70

00:02:30,319 --> 00:02:33,360

being taken away from us, and the

71

00:02:31,840 --> 00:02:35,599

antibiotics we're left with aren't

72

00:02:33,360 --> 00:02:37,680

necessarily that effective,

73

00:02:35,599 --> 00:02:39,519

and actually, in many

74

00:02:37,680 --> 00:02:40,959

cases, if the mastitis isn't too severe,

75

00:02:39,519 --> 00:02:41,920

then it actually seems to be

76

00:02:40,959 --> 00:02:43,680

better just to go in with an

77

00:02:41,920 --> 00:02:45,280

anti-inflammatory and uddermint,

78

00:02:43,680 --> 00:02:48,080

so that's good.

79

00:02:45,280 --> 00:02:49,200

In the lead up to drying-off,

80

00:02:48,080 --> 00:02:51,760

if we are talking about sort of

81

00:02:49,200 --> 00:02:53,040

preparing these cows for dry-off as well,

82

00:02:51,760 --> 00:02:54,080

83

00:02:53,040 --> 00:02:56,239

we

84

00:02:54,080 --> 00:02:58,640

milk as normal up until about

85

00:02:56,239 --> 00:03:00,400

four days before dry-off, and then we

86

00:02:58,640 --> 00:03:02,000

change the diet completely.

87

00:03:00,400 --> 00:03:04,239

We come off the clamp silage, which

88

00:03:02,000 --> 00:03:05,599

was 11.5 or just over 11

89

00:03:04,239 --> 00:03:07,280

ME,

90

00:03:05,599 --> 00:03:09,360

and we drop down onto this dry

91

00:03:07,280 --> 00:03:11,760

haylage that we've made over the

92

00:03:09,360 --> 00:03:14,159

year, purposely for this job. This is

93

00:03:11,760 --> 00:03:16,480

probably under 10 ME,

94

00:03:14,159 --> 00:03:18,400

and it's much drier, much more fibrous. It

95

00:03:16,480 --> 00:03:20,159

dries the cows up; their dung

96

00:03:18,400 --> 00:03:21,760

becomes much stiffer,

97

00:03:20,159 --> 00:03:22,879

and they actually clean up when

98

00:03:21,760 --> 00:03:25,360

they're on it as well, because there's

99

00:03:22,879 --> 00:03:26,480

less splashing of dirt and stuff. When it

100

00:03:25,360 --> 00:03:28,959

comes to

101

00:03:26,480 --> 00:03:31,280

drying-off, what

102

00:03:28,959 --> 00:03:34,080

volume of milk are these cows yielding

103

00:03:31,280 --> 00:03:37,040

sort of prior to you feeding

104

00:03:34,080 --> 00:03:38,720

your haylage

105

00:03:37,040 --> 00:03:41,040

compared to the silage that

106

00:03:38,720 --> 00:03:42,879

you were feeding previously? As

107

00:03:41,040 --> 00:03:45,120

we've come up to dry-off,

108

00:03:42,879 --> 00:03:46,319

prior to that I

109

00:03:45,120 --> 00:03:47,680

think they were doing sort of

110

00:03:46,319 --> 00:03:48,640

13.5 litres

111

00:03:47,680 --> 00:03:50,959

112

00:03:48,640 --> 00:03:52,879

on about 3.5 kg

113

00:03:50,959 --> 00:03:55,200

of concentrate, and on

114

00:03:52,879 --> 00:03:56,640

the clamp silage, obviously it's quite

115

00:03:55,200 --> 00:03:58,400

high solids at this this time of year,

116

00:03:56,640 --> 00:04:01,120

but the litres are lower, and then as

117

00:03:58,400 --> 00:04:02,480

soon as we drop it down to the

118

00:04:01,120 --> 00:04:04,959

haylage diet and we drop the

119

00:04:02,480 --> 00:04:06,640

concentrates down to about a kilo,

120

00:04:04,959 --> 00:04:09,360

then that'll will drop down

121

00:04:06,640 --> 00:04:11,519

to about 7-8 litres. It is

122

00:04:09,360 --> 00:04:13,439

significant; it's almost half the yield

123

00:04:11,519 --> 00:04:16,000

in those three or four days.

124

00:04:13,439 --> 00:04:18,160

Do you have a policy of milking the

125

00:04:16,000 --> 00:04:19,919

cows still twice a day, or do

126

00:04:18,160 --> 00:04:22,320

do you drop to a once a year?

127

00:04:19,919 --> 00:04:25,360

We do stay twice a

128

00:04:22,320 --> 00:04:26,800

day. It suits the farm, the staff

129

00:04:25,360 --> 00:04:29,280

set up and stuff like that, to

130

00:04:26,800 --> 00:04:31,520

stay twice a day, but dropping

131

00:04:29,280 --> 00:04:33,520

that milk yield by that much is

132

00:04:31,520 --> 00:04:35,680

not such a big jump, then, for

133

00:04:33,520 --> 00:04:37,520

cows. Once we give them sealant,

134

00:04:35,680 --> 00:04:39,600

I think it definitely helps

135

00:04:37,520 --> 00:04:41,360

with milk leakage. We see less milk

136

00:04:39,600 --> 00:04:42,960

leakage after dry-off. It just sets

137

00:04:41,360 --> 00:04:45,440

the right environment for the sealant.

138

00:04:42,960 --> 00:04:46,880

I suppose this year, as

139

00:04:45,440 --> 00:04:48,880

I say we've only done it for four days,

140

00:04:46,880 --> 00:04:50,400

or three and a half days, possibly, on

141

00:04:48,880 --> 00:04:52,080

that side, because as soon as you do it,

142

00:04:50,400 --> 00:04:54,880

you're going to drop the milk. What

143

00:04:52,080 --> 00:04:58,240

other criteria do you adopt when it

144

00:04:54,880 --> 00:04:59,120

comes to drying-off cows

145

00:04:58,240 --> 00:05:02,479

with

146

00:04:59,120 --> 00:05:04,560

antibiotics?

147

00:05:02,479 --> 00:05:06,479

148

00:05:04,560 --> 00:05:08,320

Any cow which had two cases of

149

00:05:06,479 --> 00:05:12,160

mastitis will get

150

00:05:08,320 --> 00:05:15,919

an antibiotic tube, and any cows with

151

00:05:12,160 --> 00:05:17,919

teat-end damage, or warts on teat ends,

152

00:05:15,919 --> 00:05:20,639

will also get a double tube.

153

00:05:17,919 --> 00:05:22,080

All the cows we treat with antibiotic

154

00:05:20,639 --> 00:05:24,160

also get the sealant as well, so they all

155

00:05:22,080 --> 00:05:25,759

get double tubed, and

156

00:05:24,160 --> 00:05:27,600

that's prior to dry-off. Today,

157

00:05:25,759 --> 00:05:28,960

we'll do it a lot.

158

00:05:27,600 --> 00:05:30,880

We certainly monitor the weather

159

00:05:28,960 --> 00:05:33,840

forecast leading up to dry-off, and make

160

00:05:30,880 --> 00:05:35,520

sure that we pick a dry day.

161

00:05:33,840 --> 00:05:36,720

Water is one of the

162

00:05:35,520 --> 00:05:38,080

worst things. If you've got a lot of

163

00:05:36,720 --> 00:05:39,759

dampness about, that's one of the

164

00:05:38,080 --> 00:05:42,320

worst things for getting infections into

165

00:05:39,759 --> 00:05:43,120

udders. We dry-off in the middle of the

166

00:05:42,320 --> 00:05:44,639

day

167

00:05:43,120 --> 00:05:46,800

because we used to always dry-off in the

168

00:05:44,639 --> 00:05:48,240

morning, and we just found that the cows after

169

00:05:46,800 --> 00:05:49,919

they had been sleeping in the beds

170

00:05:48,240 --> 00:05:51,759

overnight, they were a bit dirty on

171

00:05:49,919 --> 00:05:52,880

their udders, even though we were wiping

172

00:05:51,759 --> 00:05:54,720

and cleaning them; we just found there

173

00:05:52,880 --> 00:05:57,039

was a little bit more dirt.

174

00:05:54,720 --> 00:05:58,560

We've milked them as

175

00:05:57,039 --> 00:06:00,319

normal this morning, and then we're going

176

00:05:58,560 --> 00:06:01,520

to dry them off starting around 12

177

00:06:00,319 --> 00:06:03,600

o'clock.

178

00:06:01,520 --> 00:06:05,520

We just find that around that time

179

00:06:03,600 --> 00:06:07,199

when we get them in on a dry day around

180

00:06:05,520 --> 00:06:08,479

12 o'clock, the cows don't have much milk

181

00:06:07,199 --> 00:06:10,240

on them, maybe only a couple of litres,

182

00:06:08,479 --> 00:06:12,880

but they are

183

00:06:10,240 --> 00:06:15,199

much cleaner, so that's good.

184

00:06:12,880 --> 00:06:16,479

That’s why we do it, then. We

185

00:06:15,199 --> 00:06:17,919

just do it over the chunk of

186

00:06:16,479 --> 00:06:19,440

the day, then; it'll take us four or five

187

00:06:17,919 --> 00:06:21,440

hours.

188

00:06:19,440 --> 00:06:22,880

From the start of the procedure through?

189

00:06:21,440 --> 00:06:25,120

Yes. We would dry

190

00:06:22,880 --> 00:06:27,039

around 280 cows off in about four to

191

00:06:25,120 --> 00:06:28,960

five hours. Then the cows go out to

192

00:06:27,039 --> 00:06:30,800

the yard and stand for a period of

193

00:06:28,960 --> 00:06:32,240

time before going back to the cubicle?

194

00:06:30,800 --> 00:06:33,520

Yes, they will. They'll go and

195

00:06:32,240 --> 00:06:34,560

eat; they won't just go and sit down

196

00:06:33,520 --> 00:06:36,319

straight away. They'll probably have a

197

00:06:34,560 --> 00:06:39,039

good half an hour plus

198

00:06:36,319 --> 00:06:41,039

of standing. Will, can you just fill

199

00:06:39,039 --> 00:06:43,039

us in with a bit more detail in terms of

200

00:06:41,039 --> 00:06:45,600

the procedure of drying-off in the

201

00:06:43,039 --> 00:06:47,919

parlour,

202

00:06:45,600 --> 00:06:51,039

in terms of what

203

00:06:47,919 --> 00:06:52,800

yourself and your staff do in terms

204

00:06:51,039 --> 00:06:55,680

of drying the cows?

205

00:06:52,800 --> 00:06:57,599

We’ve all done a selective

206

00:06:55,680 --> 00:06:59,199

dry-cow training course

207

00:06:57,599 --> 00:07:00,240

on drying-off,

208

00:06:59,199 --> 00:07:01,599

so we're all

209

00:07:00,240 --> 00:07:03,199

aware of that.

210

00:07:01,599 --> 00:07:05,039

Cleanliness is so

211

00:07:03,199 --> 00:07:06,639

important. Cows

212

00:07:05,039 --> 00:07:09,680

are

213

00:07:06,639 --> 00:07:11,680

obviously milked first, and

214

00:07:09,680 --> 00:07:13,919

then after milking,

215

00:07:11,680 --> 00:07:15,919

216

00:07:13,919 --> 00:07:18,479

we wipe each teat

217

00:07:15,919 --> 00:07:20,000

individually with a sterile cotton

218

00:07:18,479 --> 00:07:22,639

wool bud that's been soaked in surgical

219

00:07:20,000 --> 00:07:26,000

spirit, and then straight after that, we

220

00:07:22,639 --> 00:07:27,599

inject that teat with the dry cow

221

00:07:26,000 --> 00:07:28,800

222

00:07:27,599 --> 00:07:31,120

tube,

223

00:07:28,800 --> 00:07:32,960

the sealant,

224

00:07:31,120 --> 00:07:34,639

and then we repeat that for the next

225

00:07:32,960 --> 00:07:36,240

teat, and each teat is individually wiped

226

00:07:34,639 --> 00:07:37,840

with that, and then the cow is

227

00:07:36,240 --> 00:07:39,440

dipped after that,

228

00:07:37,840 --> 00:07:41,039

and we just make sure that we pinch the

229

00:07:39,440 --> 00:07:43,360

top of the teat to stop the sealant going

230

00:07:41,039 --> 00:07:46,160

up into the udder.

231

00:07:43,360 --> 00:07:48,080

We try and

232

00:07:46,160 --> 00:07:49,759

keep hosing or anything like that to

233

00:07:48,080 --> 00:07:50,879

a minimum in the parlour, as well.

234

00:07:49,759 --> 00:07:53,039

Obviously, because their dung is quite

235

00:07:50,879 --> 00:07:54,960

firm, there isn't that much muck about,

236

00:07:53,039 --> 00:07:56,560

so just trying to keep water

237

00:07:54,960 --> 00:07:58,479

to a minimum, trying to keep dirt to a

238

00:07:56,560 --> 00:07:59,520

minimum. Teats are sealed from front to

239

00:07:58,479 --> 00:08:01,840

back,

240

00:07:59,520 --> 00:08:03,120

and once teat is cleaned and sealed at

241

00:08:01,840 --> 00:08:05,120

a time.

242

00:08:03,120 --> 00:08:06,720

As we do that, gloves are worn

243

00:08:05,120 --> 00:08:09,840

and kept clean at all times, just to make

244

00:08:06,720 --> 00:08:11,759

sure that there's no contamination.

245

00:08:09,840 --> 00:08:13,199

Record keeping is really important,

246

00:08:11,759 --> 00:08:15,360

obviously, prior to dry-off, because we

247

00:08:13,199 --> 00:08:16,800

keep cell count records, but then post

248

00:08:15,360 --> 00:08:19,360

dry-off, it is really important to know

249

00:08:16,800 --> 00:08:21,440

which cows have had antibiotic treatment,

250

00:08:19,360 --> 00:08:22,800

especially if you have cows calve

251

00:08:21,440 --> 00:08:24,400

early or anything like, slip a calf

252

00:08:22,800 --> 00:08:25,840

and come into milk, then you obviously got to be

253

00:08:24,400 --> 00:08:27,919

aware of their

254

00:08:25,840 --> 00:08:30,240

withdrawal periods on those

255

00:08:27,919 --> 00:08:31,919

antibiotics. The beauty of using a lot

256

00:08:30,240 --> 00:08:33,519

of sealant is that you actually negate a

257

00:08:31,919 --> 00:08:35,039

lot of that because you lower your

258

00:08:33,519 --> 00:08:37,839

risk hugely. It's also very good to have

259

00:08:35,039 --> 00:08:39,760

records of cows. We monitor

260

00:08:37,839 --> 00:08:42,000

the cows that had say higher cell count

261

00:08:39,760 --> 00:08:44,080

last lactation, or had mastitis cases

262

00:08:42,000 --> 00:08:45,200

last lactation,

263

00:08:44,080 --> 00:08:47,360

whether we dried them off with

264

00:08:45,200 --> 00:08:49,519

antibiotic then, and then what was

265

00:08:47,360 --> 00:08:50,880

the result of the following lactation -

266

00:08:49,519 --> 00:08:52,240

did that have a

267

00:08:50,880 --> 00:08:54,720

desired effect, meaning does she have

268

00:08:52,240 --> 00:08:55,760

a cleaner lactation next time?

269

00:08:54,720 --> 00:08:57,440

270

00:08:55,760 --> 00:09:00,160

Because we're calving outside

271

00:08:57,440 --> 00:09:00,959

and the environment is very clean,

272

00:09:00,160 --> 00:09:03,519

we

273

00:09:00,959 --> 00:09:05,200

have now started to wonder whether we

274

00:09:03,519 --> 00:09:06,320

should try

275

00:09:05,200 --> 00:09:08,399

276

00:09:06,320 --> 00:09:10,640

doing some cows without sealant or

277

00:09:08,399 --> 00:09:12,720

antibiotic by simply stopping milking

278

00:09:10,640 --> 00:09:13,920

them, because we bring them right down in

279

00:09:12,720 --> 00:09:16,399

milk.

280

00:09:13,920 --> 00:09:18,640

There are some low cell-count cows

281

00:09:16,399 --> 00:09:21,440

who may be young, and

282

00:09:18,640 --> 00:09:22,399

because our calving environment is

283

00:09:21,440 --> 00:09:23,920

clean,

284

00:09:22,399 --> 00:09:25,680

and

285

00:09:23,920 --> 00:09:27,279

one of the main

286

00:09:25,680 --> 00:09:28,800

reasons for giving sealant is because

287

00:09:27,279 --> 00:09:30,000

at that carving point you don't

288

00:09:28,800 --> 00:09:32,640

want them to get an infection before

289

00:09:30,000 --> 00:09:34,480

they calve, and so we feel that

290

00:09:32,640 --> 00:09:36,160

there is possibly an opportunity to

291

00:09:34,480 --> 00:09:37,279

not treat some cows with

292

00:09:36,160 --> 00:09:39,920

anything, and just let them dry off

293

00:09:37,279 --> 00:09:42,399

naturally,

294

00:09:39,920 --> 00:09:44,480

and then see how we get on.

295

00:09:42,399 --> 00:09:46,399

We're going to try that with a select

296

00:09:44,480 --> 00:09:48,160

number of cows this year.

297

00:09:46,399 --> 00:09:52,160

I think we're going to try it with a

298

00:09:48,160 --> 00:09:54,160

small group of 30, and we'll

299

00:09:52,160 --> 00:09:55,760

make sure we record all their numbers,

300

00:09:54,160 --> 00:09:58,399

and we'll watch that through and see

301

00:09:55,760 --> 00:10:00,399

what that's like in the spring. It may

302

00:09:58,399 --> 00:10:02,800

not work, or it might be absolutely

303

00:10:00,399 --> 00:10:05,440

fine; we don't know. If it

304

00:10:02,800 --> 00:10:07,600

does, will you extend that?

305

00:10:05,440 --> 00:10:09,519

If it works, and it seems like there's no

306

00:10:07,600 --> 00:10:11,440

ill effects at all, and we will monitor

307

00:10:09,519 --> 00:10:13,279

their cell count into next lactation and

308

00:10:11,440 --> 00:10:15,279

check how that does as well,

309

00:10:13,279 --> 00:10:17,120

and if we don't have any lost

310

00:10:15,279 --> 00:10:18,959

quarters or anything like that, then we

311

00:10:17,120 --> 00:10:21,120

probably will extend it to all cows

312

00:10:18,959 --> 00:10:23,360

below a certain cell count. For further

313

00:10:21,120 --> 00:10:25,120

information and detail on selecting

314

00:10:23,360 --> 00:10:28,000

individual cows and treatment of

315

00:10:25,120 --> 00:10:33,160

protocols at dry-off, please refer to the

316

00:10:28,000 --> 00:10:33,160

AHDB Mastitis Control Plan.