

M. G. FENN

discusses Golf Courses and Greenkeeping in the South of France

ALTHOUGH the French Riviera has become one of Europe's most popular holiday centres, the number of golf courses open for play during the summer is less than during the winter and early spring.

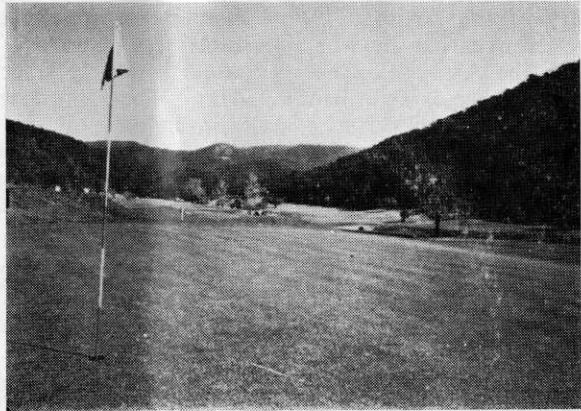
How is it that golf has taken a step back here while elsewhere during the festive and holiday seasons it has made and is making enormous strides? Perhaps a quick glance back into the history of golf on the Riviera will help us to understand the paradox.

these conditions is indeed a difficult one.

The basic causes of these difficulties can be summarised as follows:—

- (a) Lack of water.
- (b) Poorness of soil, lack of suitable soil conditioning, and failure to create a top soil of sufficient depth and quality to retain moisture.
- (c) Lack of suitable grasses capable of withstanding dryness and heat.

*The 18th Green
at Valeros with
the 1st and 6th
beyond.*



During the latter part of the 19th century and for nearly the first 40 years of the 20th century the Riviera enjoyed a busy and fashionable winter season in which golf was one of the popular sports. During the summer little holiday activity was known and the Riviera did not enjoy its present popularity.

From all this it is quite natural to assume that most golf courses on the Côte d'Azur were built entirely for winter and spring purposes and not to resist the fierce heat of long, dry summers. Because of this, some courses have to close down during the summer months whilst others remain open only with difficulty and the problem of maintaining first-class turf under

All these considerations came into question some three years ago when it was decided to construct a golf course of permanent character situated between Hyères and Le Lavandou.

This course, now known as the Golf Club de Valcros, had been beautifully planned and designed by Mr F. W. Hawtree over very difficult country and it had to remain green throughout the year.

Valcros lies in a magnificent valley surrounded by mountains covered with cork oak, pines and many other fine trees. And in this valley there existed in abundance the all important thing, *Water*. The former owners had made a barrage containing 85,000 cubic meters of water, whilst the possibilities

of a second barrage were bright since the swift running mountain streams could fill a barrage of considerably larger dimensions than the first one.

The situation of top soil for the greens and tees was also encouraging, since, in various parts of the Estate, there existed plenty of top soil of quite good quality.

The next question was the type of grass to implant on the course. Local tradition in the South of France tends to the theory that the orthodox grasses sown in the more temperate zones of Europe do not survive the heat and dryness of the Mediterranean summer climate.

On some of the courses, hot-country grasses like *Cynodon*, *Dactylon* and *Kikuyu* grass have been tried out, but on the whole they have not given good results. They die back during the winter months and leave little or no grass for long periods during the winter and spring.

It was, therefore, decided to try out some experimental grass plots composed of varying mixtures of the more resistant species of grasses.

Promising Results!

The results obtained from the trial plots were encouraging. The grasses survived quite well with regular watering and without special treatment, fertilisers, top-dressing or, indeed, soil preparation before sowing.

From these results it appeared possible to create really first-class turf with proper soil preparation before sowing and later with first-class upkeep and the usual procedures adopted in the maintenance of good-class turf.

The greens at Valcros were, therefore, sown with an orthodox Bent/*Fescue* mixture of *Highlight* *Chewing's Fescue* and *American Browntop Bent*. This mixture has thrived well from the beginning and now after the first year the greens give every indication of becoming first class.

The fairways, of course, presented by far the toughest problem because their size precluded the more intensive preparation possible for the smaller

areas of the greens. Nevertheless, these were sown down with a good quality seeds mixture composed of *Chewing's Fescue*, *Creeping Red Fescue*, *Smooth Stalked Meadow Grass* (*Dutch Prato*), *American Browntop* and *Dutch Rye Grass* (*Heraf*).

This mixture has done extremely well and has stood up to the exceptional heat and dryness of last year's summer aided, of course, by plenty of water, fertiliser and dressings of organic matter.

The tees were sown with much the same type of seeds as those used for the fairways, the main difference being that the *Dutch Smooth Stalked Meadow Grass* was replaced by *Merion Blue Grass* which has thrived and developed rapidly in the soil and climate of Valcros.

Now that a full year has passed, it may be of some interest to record some of the current upkeep problems and results.

Fertilisation

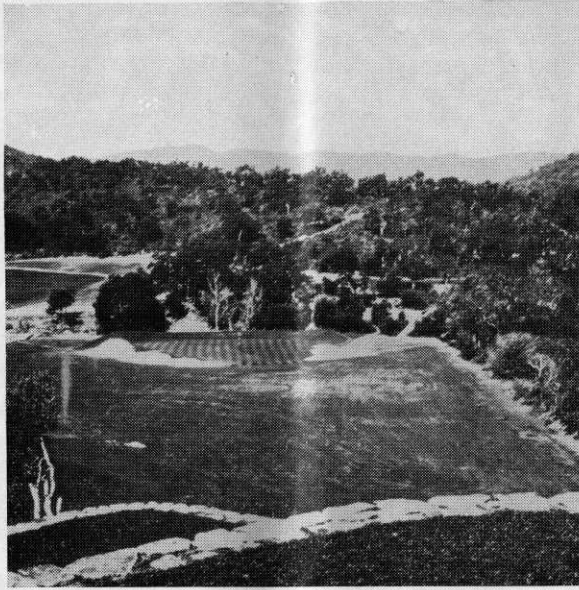
The same type of fertilisers were used on the new turf at Valcros as those used generally elsewhere. The greens were fertilised in the early part of the growing season with complete fertiliser mixtures containing sulphate of ammonia, dried blood, superphosphate, sulphate of potash and sulphate of iron.

Towards the end of the season the fertilisers were gradually reduced to light applications of nitrogen in the form of sulphate of ammonia.

Fairways and tees received regular applications of compound granular fertiliser. Experience over a full growing season at Valcros does suggest that rather more fertiliser is necessary in this warmer climate due, perhaps, to the ultra-rapid growth of the grass and also to a very heavy watering and cutting programme.

Diseases

These are, if anything, more dangerous in the warm climate of the Mediterranean. *Fusarium Patch Disease*



propagates with incredible rapidity and will slash across a green literally in 24 hours.

Some trouble was also experienced with *Ophiolobus Graminis* during the month of July but good control was obtained by the use of a Mercury Fungicide called Solusanigran. This product gives excellent control of Fusarium as well.

One of the difficulties in treating turf diseases here is the question of watering with the result that the fungicides employed are often washed away.

The only formula is to water heavily before treatment and thoroughly soak the ground to a good depth, carry out the treatment and then leave the greens as long as can be risked before watering again.

The all important thing is to avoid trouble by immediate detection of disease and rapid treatment or, even better, well-timed preventive treatment before disease appears.

Weed Control

So far this has not presented a very great problem, because the soil at Valcross has a fairly low pH. Clover has been one of the chief enemies but responded very well to C.M.P.P. selective weed killers.

The short 14th has a deep watercourse behind the green to add to the interest.

Pests

Cutworms are our chief enemy here. These caterpillars invade the greens in hordes eating the young grass shoots voraciously. If left for long, the cutworms are quite capable of thinning out the grass to the extent of serious damage.

Chlordane mixed with sand or compost has given good results—20 per cent Chlordane was used and applied at 9 grs. to the square metre. Good control was also obtained with D.D.T. (5 per cent). This was applied at 30 grs. to the square metre.

Treatment against cutworms has to be repeated quite often for even after the greens have been treated, fresh armies of these pests invade the greens anew. So numerous are these armies that they can often be seen making their way to the greens.

Sowing

Can take place from the beginning of March till June and from September

to the middle of November. That is one of the great advantages that the Mediterranean climate offers to the greenkeeper and a priceless asset in the making of new golf courses. Germination of the seed is rapid by virtue of the soil warmth. Growth and colonisation of the grass is amazingly quick too, with the result that weed competition in new swards is appreciably reduced.

Indeed, it is true to say that the greenkeeper is not always faced with disadvantages, for another asset he has, is comparatively mild and warm winters which allow him to proceed almost without interruption on his winter programme of work.

Watering

Has to be intensive and frequent. The greens are watered by pop-up sprinklers placed around the perimeter. Normally between five and six sprinklers to each green.

The tees are watered by the same system. The system is semi-automatic

and five or six holes can be watered at a time. Watering has to be done in the early morning or evening to avoid loss of water through evaporation.

The fairways are watered by means of self-travelling sprinklers. These sprinklers pull themselves forward by means of a thin cable attached to a small steel anchor.

The system is a great labour saver for the sprinklers can be set to cover a distance of 150 yards without being touched and they can water over a width of 40 yards. Valcros possesses 18 sprinklers which are capable of watering 2,700 yards of fairway each night, thus allowing each fairway to be watered three times a week.

We have been helped greatly in all our work by the constant help and advice of Mr F. W. Hawtree and by The Sports Turf Research Institute with their ever-ready advice on many of our problems. Finally, congratulations to our young greenkeeper, Mr Arcani, who handled many problems and many men for the first time in his life with such deserved success.

"SISIS" REGD PATENTS

TURF MANAGEMENT EQUIPMENT

for GOLF COURSE FAIRWAYS

12ft SCARIFIER AND BRUSH IMPLEMENTS. Model LSB/12

- For all tractors with hydraulic Linkage
- Simply and quickly attached without special tools.
- Controlled from driving position.
- Outer sections fold for transport through Gateways.
- Heads flexibly mounted for following ground contours.
- Interchangeable Brush Sections can be quickly substituted for the rake scarifier units.

RAKE SCARIFYING

with the coiled spring tine implement, regularly applied, will assist in eradicating course growth and trailing weeds. The grasses and weed seed heads are raised for mowing. Constant use improves the sward density as the grass plants are encouraged to colonise bare or weedy patches.

A fully illustrated brochure, reference LLF, sent on request.



"SISIS" Patent EQUIPMENT,

W. HARGREAVES & Co. Ltd.,

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