Here's What the Greenkeepers Say

every 2 or 3 weeks. If the grass is dry we do not hesitate to treat regardless of temperature.

When we seem to have things pretty well in hand something like this webworm comes along. I have not been bothered much on either of our courses and feel that perhaps the fact that our turf is all pretty well poisoned may be an explanation.

Florida Speaks

By O. SPROULE BAKER, Greenkeeper Boca Raton Club, Boca Raton, Florida

1.—WEBWORMS started about July 1. Sprayed arsenate of lead (under pressure of 300 lbs.), into turf forty pounds per green, eight thousand square feet in one hundred and fifty gallons of water. Control not complete. Tried Red Arrow oil of Pyrethrum extract spray one to four hundred which brought them (and with wire worms, ear wigs, bugs and beetles) to the surface stunning them but not a kill to the webworms, all others killed.

By finding the webworms again active next few hours we again sprayed Red Arrow to bring them to the surface and then sprayed them with "Cyanogas," a dust mixed six pounds to one hundred and fifty gallons of water and added forty pounds arsenate of lead to eight thousand square feet. The kill was one hundred percent with not any damage to the turf, other than that which had been done by the sod webworms.

A week later a light shot of sulphate of ammonia, five pounds per thousand square feet. Care should be given not to use either the dust or sulphate of ammonia too close together as the base of carrier of the gas is hydrated lime. (Calicium cyanide dust (Ca Cn) 2) (40 to 50% Calcium cyanide).

Also the "gas" sprayed on the greens where etiolation of plants (yellow spots) is caused by scurvy scale (a soft bodied sucking insect) which most all of us in the past have been passing off as a "Scald" of some kind. We worked this out during this past year by cutting a plug and putting under a strong glass for examination finding the roots infested with the small grayish white scale which we looked up and found to be scurvy scale. It is also controlled with the usual brown patch dose of one ounce corrosive sublimate, two ounces of calomel per thousand square feet after two or three applications—lime sulphur (32 degrees Baume). Spray one gallon to one hundred and fifty water also is good control if the spray is forced into the mat of grass. It will not burn at the above rate. The reaction of the lime sulphur in the soil is too gypsum, and will leach out. Have found this scale as deep in the roots as two inches. Think I have made a discovery of helpful importance to our brother greenkeepers in this. If so, I am happy to pass it on to you all.

2-A—No brown patch this summer on these Bermuda greens, but did use the corrosive and calomel, one and two ounces respectively per one thousand square feet as a preventative to prepare for seeding to Kentucky bluegrass this next month.

2-B—The mercury compounds with sulphate of ammonia applied in dry form, five pounds per and three times during summer.

3—No; made two applications, each of Milorganite of fifty pounds per thousand square feet about two months apart and top-dressed over the material.

4—Over-feeding is not good at one dose, rather small amounts and often during the season when play is on. (We are closed from April to December,



SCENE ON THE GOLF COURSE AT BOCA RATON, FLORIDA

but maintenance is intensively pursued the entire year with all its vexing problems in this part of the world. Rain? about 17 inches over Labor Day! Drouth all summer). 5—No, we have not, as we keep enough moisture and by using peat moss in the top-dressings obtain good air pore space.

Toronto Hit by Hot Weather

By WM. J. SANSOM, Greenkeeper Toronto Golf Club, Toronto, Ont.

Having received questionnaire for our NA-TIONAL GREENKEEPER, prepared by our worthy President, Colonel John Morley, I feel that it is our duty to try and tell the members of our clubs through our NATIONAL GREENKEEPER journal something about the problems we have had to deal with this season of 1931.

It undoubtedly has been a very hard season on turf grasses. Due to the very hot, humid weather and drought we have had very few courses, I venture to say, but what have had their own troubles brown patch, scald and the webworm. Golfers as a rule do not know or understand how their greenkeepers try to cope with these unusual conditions.

No doubt there will appear in the NATIONAL GREENKEEPER some very interesting and educational articles of what Nature has handed to us this season if we will only write our own observations and our methods of treatment.

On looking over my records for this season for watering alone, fairways, tees and greens, starting on the 9th day of May and continuing up to the present time of writing, the 17th day of September, with no prospect of a let up in sight as yet. The latter part of June became very hot. On the 17th day of July we had a severe thunder storm with a temperature ranging from 85 to 100 degrees. Immediately after the storm, we discontinued watering until the 23rd and also four days in August from the 10th to 14th—surely a record season for watering.

Our courses around the Toronto District suffered most from scald although there was some brown patch reported, I have to admit that I did not see any brown patch until after treatment and the turf had recovered. But I did see plenty of badly scalded greens.

I was fortunate in not having brown patch or scald on any of my greens. But I did have scald on two fairways, No. 1 and No. 18. These fairways are pretty well enclosed with trees with very little air circulation and a soil that is very sandy and which gets very hot. The two fairways mentioned looked very beautiful up till the third week in July. The turf being quite 30 per cent of Poa Annua took the scald very badly with the result that I have very little Poa Annua left in those fairways. I have let Nature take its course and have not used any special treatment.

Personally, I am of the opinion that over-feeding and over-watering does help fungus diseases. The only explanation that I can give for escaping both brown patch or scald on my greens was due to the fact that I was at that time using the Del Monte rake for my greens very freely and also making sure my greens were being very thoroughly poled with bamboo each morning.

My watering was done at night, starting at 9 o'clock and finishing at 6 o'clock. We get our water supply from the creek having no storage tank and pump direct to the greens and fairways. Therefore our water from the creek is always quite warm in comparison to the township water used by many of the clubs.

I believe there can be too much dope used in the way of fertilizers and chemicals for the production of a good healthy turf. Not so much, perhaps, the use but rather the abuse that tells the tale. When we consider and enumerate the list of fertilizers, inorganic, organic, humus and mushroom soil that is on the market it is a very easy matter to err on what we use. I have always stuck to the practice of not using any organic fertilizer during the hot summer months to set up or cause any fermentation. At the same time I am a firm believer in organic provided it is used in early spring or in the fall of the year around the middle of September for fall and April for spring use.

Nature does her best for turf when the nights are cool with a normal rainfall. In the spring and fall nitrogen from an organic source is slowly released to feed the growing turf.

I can truthfully say that we have never had a case of brown patch and have never spent a cent of money on any chemicals for a preventative. I am old-fashioned enough to still depend on using a good compost for topdressing, believing that by building up a healthy soil we can produce a healthy turf.

I believe in aerating greens by a thorough raking occasionally, using a good two or thee-year-old