## All Nine Lives ....

## How to Kill Cattails

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Cattails cause a number of problems in many ditches and ponds in the Corpus Christi, Tex., area.

They can prevent proper water movement and during heavy, infrequent, rains common to South Texas, often bring about considerable flooding. They are a major nuisance on some golf courses, where their tall growth may interfere with the proper execution of a golf shot.

Various eradication means have been tried, but none with permanent success. Among the weed-killers which had been used are: 2,4-D; 2,4-D in fuel oil; and sodium arsenite. The following experiment was instituted in an effort to find an herbicide which would give longlasting control.

Four standard, but locally untried, weed-killers were employed: Dalapon, MSMA, Calar, and Amitrole. Two different dilutions of each chemical were tested.

The experiment was set up at the Oso Beach Municipal Golf Course\* in Corpus Christi along the edge of a large pond paralleling No. 10 fairway.

Each experimental plot was 6 feet wide, about 5 feet deep, and contained between 100 and 200 plants. The plants in each plot were sprayed to run-off. No wilting agents were used. Two applications of each chemical were made 14 days apart in late June and early July of 1968 and results were read in late September (3 months following the first application).

Each day of treatment was sunny and warm (air temperature about  $85^{\circ}$  F) with a moderate wind from the southeast. Time of treatment was between 4:30 and 6:30 p.m. There were three replications of each treatment and six untreated control plots.

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Results (see accompanying table) show that both Dalapon and MSMA gave good control. After the applications, all plants in the Dalapon tests at both dilutions were dead, brown and fallen over. In the MSMA tests, nearly all plants were dead and brown and most of them were fallen over.

Several healthy plants remained in three MSMA plots but it was assumed that these were missed accidentally by the spray material.

Calar and Amitrole at both dilutions caused considerable brown flecking of the leaf and stem with the edges of the leaves turning brown. However, all plants remained alive. Control plants stayed healthy and vigorous.

It would appear from these tests that both Dalapon and MSMA will give adequate control of cattails in this area in the summer. Moreover, the author noted that one treatment with these chemicals seemed sufficient although in this experiment



Tom Lawrence, right, manager and club professional and Frank Knesek, superintendent, are standing in front of the new club house at Oso Beach Municipal Golf Course.

two treatments were used. After the first treatment plants died quickly and the second treatment was applied to dying and dead plants.

In early October, following gathering of data, the entire area was treated with Dalapon at the rate of 8 tbsp/gal. All plants were killed and no regrowth has been noted up to the present time (nearly 6 months later).

Results of herbicide tests on cattails at Oso Beach Municipal Golf Course, Corpus Christi, Texas, in the summer of 1968

Chemical	Dilution	Rep.	Appearance of plants 3 months following treatment							
Dalapon*	8 tbsp/ga	1 1	All	ants	dead,	brown,	and	fallen	over	
(powder)	and the second	2	"	"	"	"	"	"	"	
and the said		3	"	"	"	"	"	"	"	
	16 tbsp/ga	1 1	"	"	"	"	"	"	"	
		2	"	"	"	"	"	"	"	
		3	"	"	"	"	"	"	"	
MSMA**	2 oz/gal	1	All	olants	dead,	brown	, but	not fo	allen	over
(liquid)	110.000.00	2	"	"	"	"	"	"	"	"
		3	All	ants	dead,	brown,	and	fallen	over	
	4 oz/gal	1	"	"	"	"	"	"	"	***
		2	"	"	"	"	"	"	"	***
		3	"	"	"	"	"	"	"	***
Amitrole (powder)	6 tbsp/ga	ıl 1	Edge	es of	leaf br	own, m	any	brown	flec	ks on
			leaf	and	stem,	plants a	live			
		2	"	"	"		"	"	"	"
		3	"	"	"	"	"	"	"	"
	12 tbsp/ga	al 1	"	"	"	"	"	"	"	"
		2	"	"	"	"	"	"	"	"
		3	"	"	"	"	"	"	"	"
Calar**	2 oz/gal	1	"	"	"	"	"	"	"	"
(liquid)		2	"	"	"	"	"	"	"	"
		3	"	"	"	"	"	"	"	"
	4 oz/gal	1	"	. 11	"	"	"	"	"	"
		2	"	"	"	"	"	"	"	"
		3	"	"	"	"	"	"	"	"

(no treatment)

\* furnished by Eastern Seed Co., Corpus Christi, Texas

\*\* furnished by Vineland Chemical Co., Vineland, New Jersey

\*\*\* several healthy plants remain



"Where's the fairway?" Frank Knesek (we think that's who it is) shows the view golfers used to have of the fairway from the 15th tee at Oso Beach.

<sup>\*</sup> Thanks to Frank Knesek, golf course superintendent, and Tom Lawrence, manager and club professional, for their cooperation and encouragement.