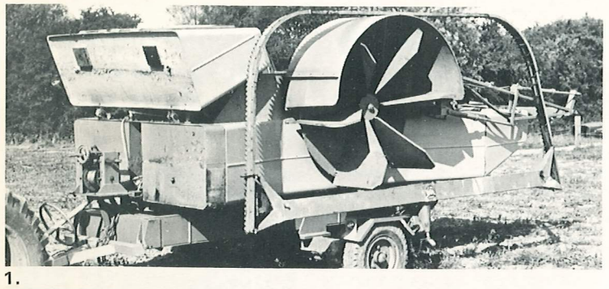
Fully transportable with own launching/loading trailer

A two-wheeled trailer can be supplied with the boat that not only accommodates the weed cutter in its compact travelling form but also provides a launching platform with built-in winch for loading and unloading. Take the Weed Cutter to the spot on the waterway where you wish to start work. If you can position the towing vehicle there, you should be able to launch the Weed Cutter and recover it after it has finished its job. The Cutter can be launched or recovered over a steep vertical river bank up to 4 ft. high (1·2 m.).



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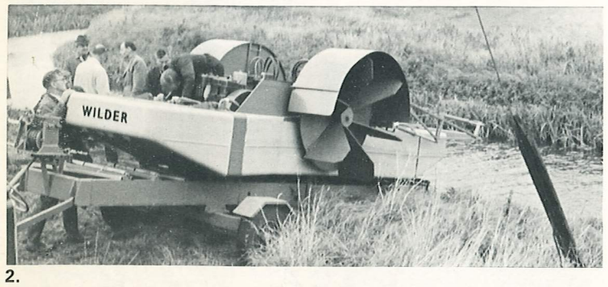

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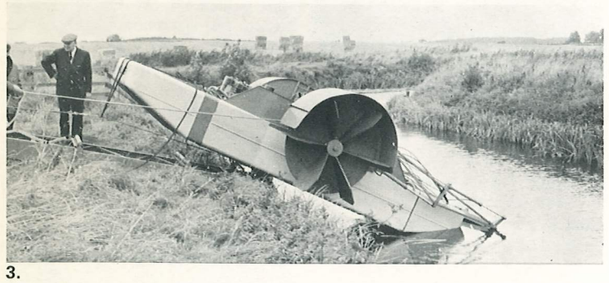

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1. Launching/Loading trailer is driven to launch point.
2. Trailer is extended to reach over the water and float section lowered into position at end of trailer extension.
3. Boat tips into water. The tipping operation works equally well in reverse when winching the boat out of the water.
4. Cutter bar is laid on the bank and the boat manoeuvred into position for connection.

Patent No. 1,057,712: other patents (Home and Overseas) applied for. Illustrations and descriptions are not binding and the manufacturers reserve the right to amend specifications and prices without notice. All machines are offered subject to the company's terms of business and conditions of sale — copies on application.

Technical Specification

Materials of Construction
Hull: Double skin fibreglass with in-fill foam plastic.
Paddles: Marine plywood.
Cutter Bar: Fixed and moving blades made of flexible bandsaw steel.
'V' cutters formed in the bandsaw (no rivetted sections), tips 1½" (38 mm) apart. Damage infrequent due to safety overloads (see Hydraulics) but easily repairable by brazing. Rigid 'U' shape formed by steel backing to fixed blade.

Engine
Make and model: Lister diesel type SR2 Twin cylinder.
Cooling: Air cooling adequate for air inlet temperatures up to 125°F (52°C).
Starting: Hand starting on the half speed shaft.
Continuous b.h.p. at 2500 rev/min: 15·5 h.p. (15·7 c.v.).
Fuel tank capacity: 2·5 gallons (11·4 litres).

Hydraulics
Paddle drive: Each paddle drive consists of a variable delivery reversible axial piston pump supplying oil to an orbital motor mounted in each paddle hub. Paddle speeds are infinitely variable up to 60 r.p.m. in each direction. A gear-type pump maintains boost oil supply to each paddle circuit.
Cutter Bar position controls: Gear type pump supplies oil to two lift rams and two tilt rams. Control is by three manually operated control valves of the spring centering type. The tilt ram circuit incorporates a cross-over relief valve to allow the cutter bar to "break-away" when hitting an obstruction.
Cutter Blade Drive: Gear type pump supplies oil to the orbital motor which drives the cutter bar knives. Cutter bar speed varies with engine speed, up to 250 strokes a minute. Operation is by a detent type two-direction control valve. An overload valve is provided set so as to prevent damage to the knives should they catch an obstruction.
Filtration: All circuits are protected by micron and suction filters.

Dimensions

Overall width:
Paddles (4 ft. 6 in.) withdrawn
7 ft. 9 in. (2·36 m.)
Paddles (4 ft. 6 in.) extended
10 ft. 1 in. (3·07 m.)
Paddles removed
6 ft. 6 in. (1·98 m.)

Overall length:
End floats in position
16 ft. 7 in. (5·05 m.)
End floats raised
10 ft. 7 in. (3·23 m.)

Height above water line:
Paddles (3 ft. 6 in.) fitted
2 ft. 11 in. (0.89 m.)
Paddles (4 ft. 6 in.) fitted
3 ft. 8 in. (1·12 m.)

Draught: approximately
12 in. (0.30 m.)

Weight:
With Lister engine
24 cwt. (1230 kg.)

Cutter bar:
Width at highest point
12 ft. (3·46 m.)
Depth (standard)
4 ft. 6 in. (1·37 m.)
Depth (optional)
5 ft. 6 in. (1·67 m.)

Trailer Specification

The trailer is of reinforced steel box construction with a sliding extension and facilities are provided to tilt the bed. A series of rubber rollers and a heavy duty two-speed winch are fitted as standard.
The heavy-duty axle is fitted with Flexitor rubber suspension units. Five stud taper roller bearing hubs and brakes operated by an overrun mechanism on the drawbar ball hitch, also by hand lever. Tyres allow a maximum road speed of 40 m.p.h. (64 k.p.h.)

Dimensions:
Overall length closed
14 ft. 0 in. (4·27 m.)
Overall length extended
21 ft. 10 in. (6·65 m.)
width 7 ft. 10 in. (2·39 m.)
height (unladen) 4 ft. 4 in. (1·32 m.)
width of roller bed 3 ft. 1 in. (0·94 m.)
weight 11 cwt. 3 qtrs. (600 kg.)
Wheel equipment: 23 in. (584 mm.) × 5 in. (127 mm.) × 10 ply tyres
Brakes: 10 in. (254 mm.) diam. drum
Winch: 1 ton heavy duty 2-speed with brake. Fitted with 30 ft. (9·14 m.) by 8 mm. high tensile wire rope. Maximum angle of bed tilt 30°.

These specifications cover the standard Wilder Water Weed Cutter. For particular applications requiring alteration of these specifications please contact the manufacturer.

Wilder

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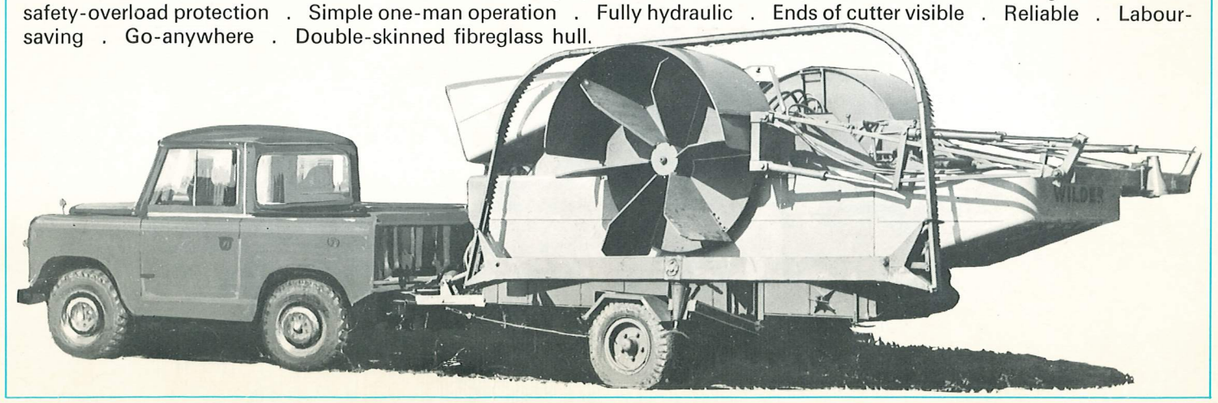
TIB 27/2838.

Wilder

285
Peter Reed
MOBILCO
MOBILCO LTD.
Mitcham, Vic. 3125
Phone: 874-0341
After Hours: 735-1596

water weed cutter

Cutter follows profile of water course . Versatile . Highly manoeuvrable . Copes with heavy and floating weed . Full safety-overload protection . Simple one-man operation . Fully hydraulic . Ends of cutter visible . Reliable . Labour-saving . Go-anywhere . Double-skinned fibreglass hull.



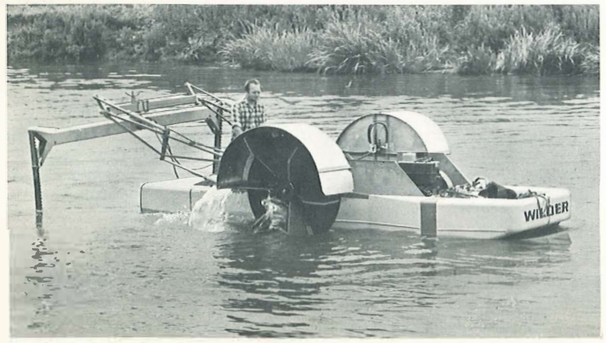
The complete one-man weed cutter for any water weed control problem

Weeds cause many problems for those concerned with controlling water levels and providing water supplies. Here is the answer to those problems. A one-man water weed cutter.

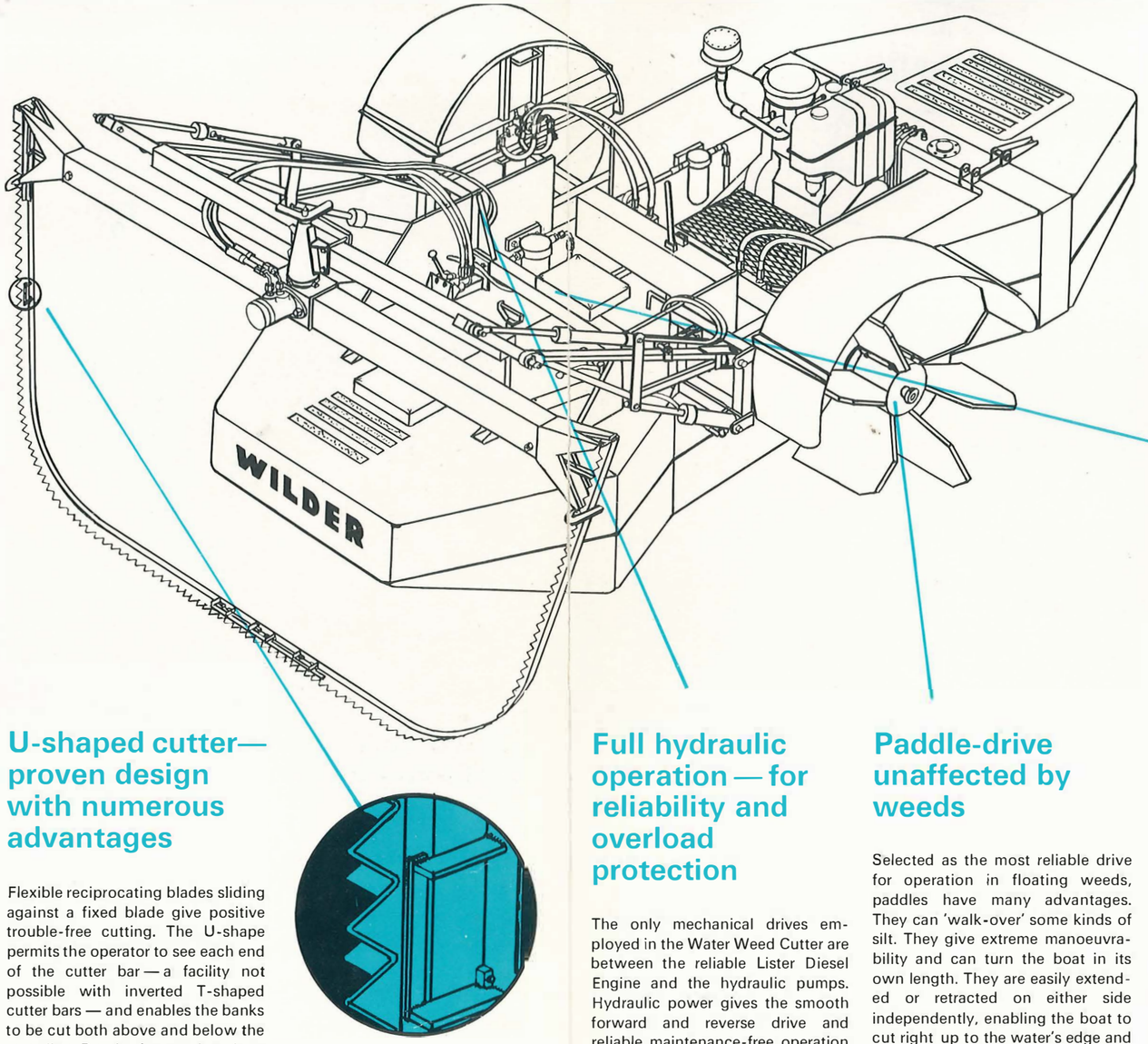
Versatile, thoroughly reliable and easily transportable, with its own launching and loading trailer, the Wilder Water Weed Cutter saves the manual work of squads of men and operates at speeds of up to 4 m.p.h. ($6\frac{1}{4}$ k.p.h.). It has been developed in co-operation with river and drainage authorities in the U.K. and overseas. It has proved itself in service with these authorities. Its development represents an engineering achievement that gives it a versatility of operation, a reliability and low maintenance requirement that will be readily appreciated by land drainage engineers.

The cutter bar can be operated ahead of the boat . . .

or by a simple reversing operation . . .



can be operated at the rear.



U-shaped cutter—proven design with numerous advantages

Flexible reciprocating blades sliding against a fixed blade give positive trouble-free cutting. The U-shape permits the operator to see each end of the cutter bar — a facility not possible with inverted T-shaped cutter bars — and enables the banks to be cut both above and below the waterline. Depth of cut and angle or slope of the cutter bar is controlled hydraulically, enabling the operator to follow the contours of the river bed. Cutting takes place along the whole length of the 'U', including the two curved portions. The whole blade is completely reversible so that the cutter can work ahead of the boat, suitable for emergent weeds, or behind the boat, suitable for very heavy submerged weeds. The knife drive hydraulic motor, is reversible to de-jam quickly and easily. The blade has no projections on which weeds will catch.

It is very quickly detachable by means of one male/female cone attachment and snap on-off hydraulic couplings. This facility enables the boat to be put into service and dismantled after service very quickly and easily. The hydraulic power that positions the blade can be utilised to 'push-off' the boat when grounded in shallow water.

Full hydraulic operation — for reliability and overload protection

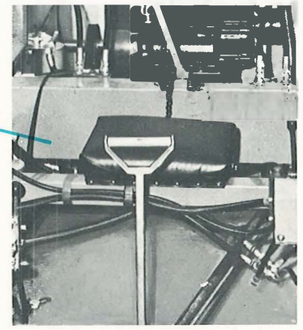
The only mechanical drives employed in the Water Weed Cutter are between the reliable Lister Diesel Engine and the hydraulic pumps. Hydraulic power gives the smooth forward and reverse drive and reliable maintenance-free operation so necessary in this type of work. All hydraulic circuits are provided with reliable safety overloads which protect the paddles, cutter bar beam and cutter knives before they reach breaking point through hitting or catching obstructions. The hydraulic oil is cooled by the water in which the boat is operating.

Paddle-drive unaffected by weeds

Selected as the most reliable drive for operation in floating weeds, paddles have many advantages. They can 'walk-over' some kinds of silt. They give extreme manoeuvrability and can turn the boat in its own length. They are easily extended or retracted on either side independently, enabling the boat to cut right up to the water's edge and to operate successfully in narrow waterways. Paddle-drive lends itself to two-way operation and is equally effective whether the boat is going forward or back. With the cutter working either in front of or behind the boat, paddle-propulsion provides the thrust or counter-thrust necessary to hold the blade to its work and the boat on its course. The option of 3′ 6″ or 4′ 6″ (1·07 m. or 1·37 m.) diameter paddles is available.

Controlled easily by unskilled labour

The operation of the Wilder Water Weed Cutter has been designed for 'instinctive' control. The operator can sit facing in either direction, depending on whether the cutter bar is ahead of or behind the boat. The operating arm is in between the two seats. Push it forward and the boat goes forward; pull it back and

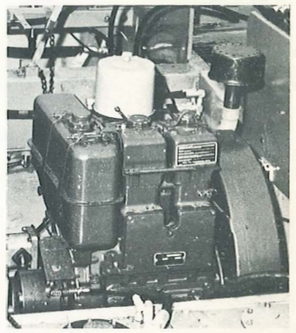


the boat goes back. The greater the movement, the faster the speed. Turn the arm to the right or left and the boat will turn in the same direction. This applies to the movement of the boat in relation to the position of the man whichever way he is sitting. The controls for positioning the cutter bar are similarly easy to operate. An unskilled operator could be using the boat efficiently and well after less than a day's training.

Unsinkable double skin glass fibre hull

The hull is constructed of a foam plastic sandwiched between an inner and outer glass fibre shell around a timber frame. The hydraulic oil reservoir has its own water-cooled section in the hull. The boat is virtually unsinkable. The float sections at each end can be folded back to reduce the overall length to 11 ft. for turning in narrow waterways. The hull is free of projections on which weed would catch and is waisted centrally in order to accommodate the paddles when fully retracted.

Reliable diesel engine—provides more-than-ample power



The world-renowned Lister diesel SR2 air-cooled engine developing 15 h.p. at 2500 r.p.m. is the standard engine fitted to the Water Weed Cutter. Its outstanding reliability, easy starting, and excellent world-wide maintenance facilities have proved ideal for the task. The engine provides more than ample power to all hydraulic pumps for driving the paddles and cutter bar and operating the hydraulic rams.