This does not constitute a formal recommendation. When using herbicides always read the label, and when in doubt consult your farm advisor or county agent.

This is an excerpt from the book Weed Control in Natural Areas in the Western United States and is available wholesale through the UC Weed Research & Information Center (wric.ucdavis.edu) or retail through the Western Society of Weed Science (wsweedscience.org) or the California Invasive Species Council (cal-ipc.org).

Zannichellia palustris

Horned pondweed

Family: Zannichelliaceae (horned pondweed)

NON-CHEMICAL CONTROL

Biological: grass carp	E*
Cultural: benthic barrier	G if barriers are in place by early spring
Cultural: drawdown	F unless drawdown allows complete drying of sediments for several weeks. Seed may survive
Cultural: shading	P plants are well adapted to low light (some dyes can be useful if applied early and often)
Mechanical: cutting	G but plants will regrow quickly
Mechanical: hand pulling or vacuuming	G if roots and rhizomes are removed; plants will regrow from seed

CHEMICAL CONTROL

The following specific use information is based on published papers and reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use.

Dye:	
Aquashade	

Herbicide:	
2,4-D	NIA
Acrolein	E
Bispyribac-sodium	NIA
Copper formulations	P
Diquat	G
Endothall	G
Flumioxazin	NIA
Fluridone	G*
Glyphosate	NIA
Imazamox	NIA
Imazapyr	NIA
Penoxsulam	NIA
Triclopyr	G

= Excellent control, generally better than 95%

G = Good control, 80-95%

= Fair control, 50-80%

= Poor control, below 50%

 $\label{lem:control} \textbf{Control includes effects within the season of treatment.}$

Control is followed by best timing, if known, when efficacy is \mathbf{E} or \mathbf{G} .

= Likely based on results of observations of related species

NIA = No information available

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. Weed Control in Natural Areas in the Western United States. Weed Research and Information Center, University of California. 544 pp.

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