

Comparison of Recirculating Aquaculture Systems Versus Organic, Sea-Based Net Pens in Europe

Issue	Recirculating Aquaculture System (RAS)	Organic Sea-Based Net Pens Europe
Spread of infectious agents	Almost zero, intake water filtered and disinfected	Common - cannot control sea currents
Technology	Off the shelf components	Off the shelf components
Predators	None from water, air or land	Common – seals, sharks, birds of prey
Environmental pollution	Minimal – effluent filtered and treated	Substantial – all waste directly into the sea
Growth period	12 - 14 months	18 to 24 months
Growth curve	Easily modified - all variables computer controlled	Difficult due to ocean variables
Harvests and Revenue over ten years	Ten full capacity harvests, 2.3 more than net pens	6.7 full capacity harvests
Escapes	None	Common
Capital Costs	High	Medium
Operational Costs	\$2.50+/lb.	\$2.50+/lb.
Crop insurance	Yes	Difficult due to acts of nature
Optimum growth environment	Yes, as all water characteristics can be maintained	No, need cold sea water with high currents to dilute wastes
Price Premium	Yes, with no air freight	Yes, with air freight
Local	Yes, and American grown in Maine USA	No, European grown
<a href="#">Palom Aquaculture, Gouldsboro Maine</a>		
May 5, 2015		