

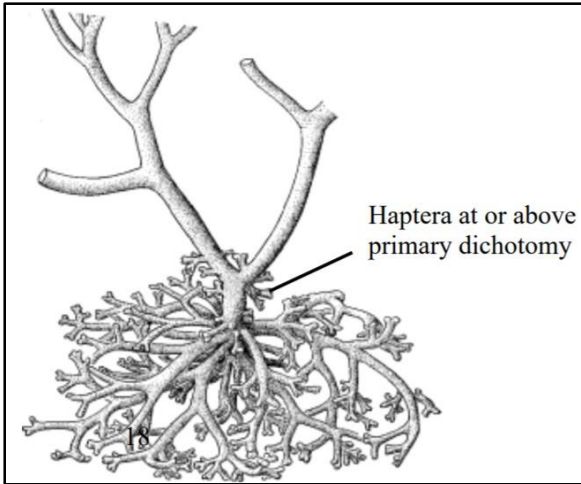
Channel Islands National Park's Kelp Forest Monitoring Program

Indicator species reference guide for
5 M QUADRATS



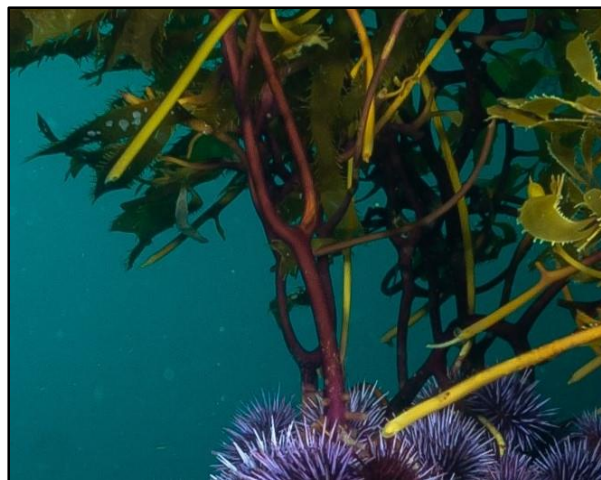
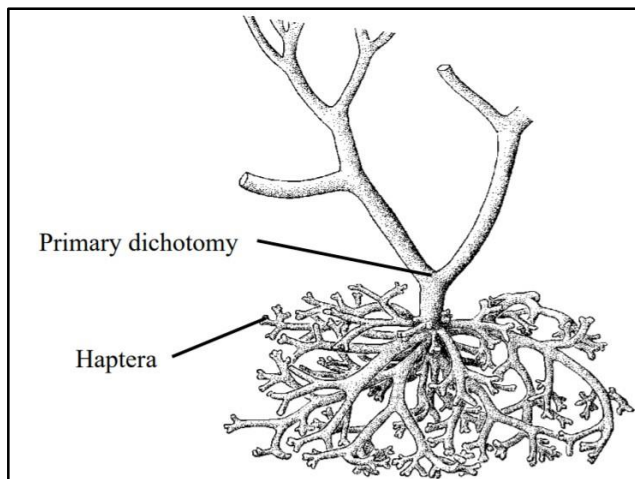
***Macrocystis pyrifera* (Adult)**

Giant kelp adult (haptera at or above primary dichotomy)



***Macrocystis pyrifera* (Subadult)**

Giant kelp subadult (over 1 m tall)



***Sargassum horneri* (Adult)**

Devil weed adult (> 0.5 m tall or reproductive)



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Brett Seymour NPS-SRC

***Sargassum horneri* (Juvenile)**

Devil weed juvenile (< 0.5 m tall)



Kenan Chan NPS



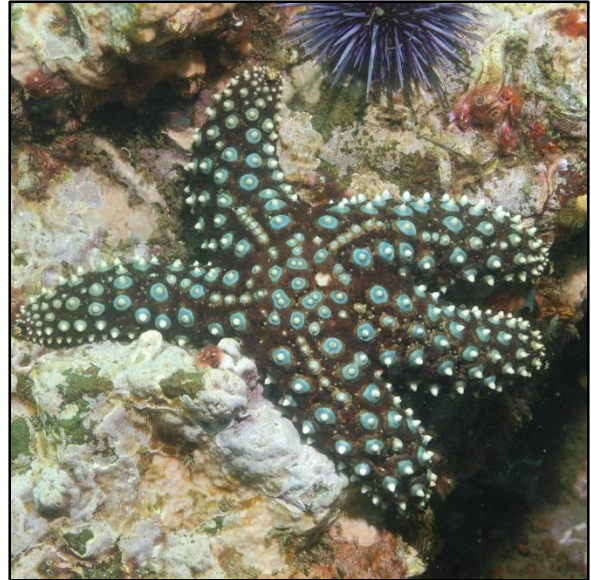
Brett Seymour NPS-SRC

Pisaster giganteus

Giant spined sea star



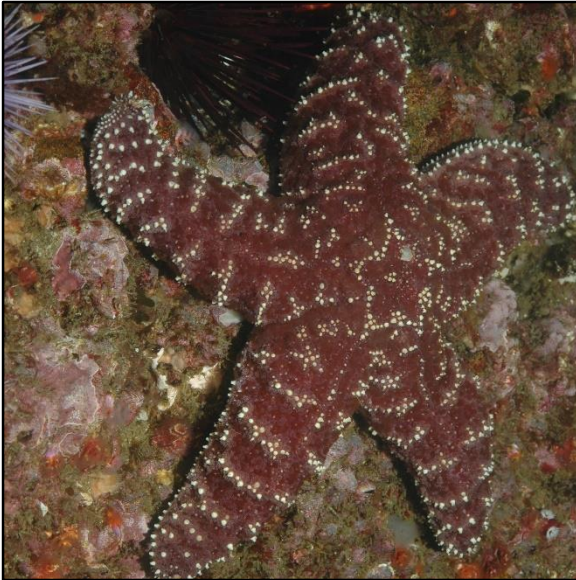
Kelly Moore NPS



Kelly Moore NPS

Pisaster ochraceus

Ochre sea star



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***Undaria pinnatifida* (Adult)**

Wakame adult (greater than 0.5 m tall and well developed/reproductive sporophyll)



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***Undaria pinnatifida* (Subadult)**

Wakame subadult (greater than 0.5 m tall and not reproductive (can have beginning stages of sporophyll but not well developed or mature sporophyll))



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***Undaria pinnatifida* (Juvenile)**

Wakame juvenile (juvenile = less than 0.5 m tall)



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