**Supplemental Table 2:** Museum specimens used to determine the presence of SSaDV and WAaDs over time. Historical samples also reported in Hewson et al., (2014) were also used in this analysis. CAS= California Academy of Sciences; MNH = Museum of Natural History Los Angeles.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Museum** | **Species** | **Location** | **Date of Collection** | **Accession Number** | **Catalog Number** |
| CAS | *Evasterias troscheli* | Kodiak Is., Ugak Bay, Alaska | 7/24/03 | 32335 | 18288 |
| CAS | *Evasterias troscheli* | Kodiak Is., Ugak Bay, Alaska | 8/18/03 | 32335 | 18288 |
| CAS | *Evasterias troscheli* | Departure Bay, Vancouver Island, British Columbia | 1/13/99 | 29987 | 158318 |
| CAS | *Evasterias troscheli* | Departure Bay, Vancouver Island, British Columbia | 1/13/99 | 29987 | 158318 |
| CAS | *Evasterias troscheli* | Departure Bay, Vancouver Island, British Columbia | 5/19/99 | 29987 | 158318 |
| CAS | *Evasterias troscheli* | Tsuruga, Fukui Prefecture, Japan | 5/21/01 | 51864 | 116025 |
| CAS | *Evasterias troscheli* | Kodiak Is., Ugak Bay, Alaska | 11/7/66 | 32337 | 18290 |
| CAS | *Evasterias troscheli* | Gulf of Alaska, Alaska | 7/14/99 | 74033 | 181404 |
| CAS | *Evasterias troscheli* | Burnaby Narrows, British Columbia | 6/1/21 | 51272 | 113363 |
| CAS | *Evasterias troscheli* | Gulf of Alaska, Alaska | 8/5/97 | 76686 | 189859 |
| CAS | *Pycnopodia helianthoides* | Gulf of Alaska, Alaska | 5/31/23 | 63034 | 192595 |
| CAS | *Evasterias troscheli* | Shumagin Islands, Gulf of Alaska | Unknown | 64064 | 159116 |
| CAS | *Evasterias troscheli* | Departure Bay, Vancouver Island, British Columbia | Unknown | 29987 | 158314 |
| CAS | *Evasterias troscheli* | Departure Bay, Vancouver Island, British Columbia | 6/5/01 | 29987 | n/a |
| CAS | *Evasterias troscheli* | Izhut Bay, Afognak Island, Alaska | 4/11/78 | 31625 | 16674 |
| CAS | *Pycnopodia helianthoides* | Dutch Harbor, Alaska | 7/19/76 | 69015 | 171749 |
| CAS | *Evasterias troscheli* | San Francisco Bay, California | Unknown | 59132 | 132209 |
| CAS | *Evasterias troscheli* | Point Arena, Mendocino County, California | 8/2/94 | 50565 | 112040 |
| CAS | *Evasterias troscheli* | Prince William Sound, Alaska | 10/17/82 | 67082 | 164134 |
| CAS | *Pycnopodia helianthoides* | Offshore, Oregon | 7/9/03 | 56565 | 122109 |
| CAS | *Evasterias troscheli* | Trinidad Head, Humboldt County | 4/30/1894 | 51865 | 116026 |
| CAS | *Evasterias troscheli* | British Columbia | 5/22/01 | 51271 | 113362 |
| CAS | *Pycnopodia helianthoides* | Yakutat, Gulf of Alaska | 6/20/99 | 82570 | 203726 |
| CAS | *Pycnopodia helianthoides* | Islands of the Four Mountains, Gulf of Alaska | 6/16/98 | 64405 | 159115 |
| CAS | *Pycnopodia helianthoides* | Aleutian Islands, Alaska | 5/11/78 | 53822 | 119428 |
| CAS | *Evasterias troscheli* | Prince William Sound, Alaska | 5/31/23 | 26721 | 167612 |
| CAS | *Pycnopodia helianthoides* | Asilomar, California | 1/1/13 | 49135 | 108895 |
| CAS | *Evasterias troscheli* | Prince William Sound, Alaska | 8/6/75 | 15108 | 167584 |
| CAS | *Evasterias troscheli* | Attu Island, Aleutian Islands, Alaska | 10/29/76 | 50610 | 112368 |
| CAS | *Pycnopodia helianthoides* | Glacier Bay National Park, Alaska | 6/17/76 | 82569 | 203725 |
| CAS | *Evasterias troscheli* | San Francisco Bay, California | 1/1/18 | 59133 | 132242 |
| CAS | *Evasterias troscheli* | Cook Inlet, Alaska | Unknown | 31974 | 17496 |
| CAS | *Pycnopodia helianthoides* | Monterey, California | 7/1/17 | 51937 | 116125 |
| CAS | *Pisaster ochraceus* | Departure Bay, Vancouver Island, British Columbia | 7/1/17 | 29987 | 158316 |
| CAS | *Pisaster ochraceus* | Departure Bay, Vancouver Island, British Columbia | 5/9/68 | 29987 | 158316 |
| CAS | *Pisaster ochraceus* | Departure Bay, Vancouver Island, British Columbia | 5/1/23 | 29987 | 158316 |
| CAS | Dermasterias imbricata | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Patiria miniata* | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Pisaster ochraceus* | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Patiria miniata* | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Pisaster giganteus* | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Pycnopodia helianthoides* | Posession Point, California | 6/5/2012 | n/a | n/a |
| CAS | *Pisaster brevispinus* | Posession Point, California | 6/5/2012 | n/a | n/a |
| MNH | *Pisaster ochraceus* | Santa Barbara id., Channel Ids., California | 6/21/05 | CI99-1 dive 2 | n/a |
| MNH | *Pisaster ochraceus* | Santa Barbara id., Channel Ids., California | 6/21/05 | CI99-1 dive 1 | n/a |
| MNH | *Pisaster ochraceus* | Santa Barbara id., Channel Ids., California | 6/21/05 | CI99-1 dive 1 | n/a |
| MNH | *Pisaster giganteus* | Channel Ids., California | 6/21/05 | CI-99-12 | n/a |
| MNH | *Pisaster giganteus* | Channel Ids., California | 6/21/05 | CI99-10 | n/a |
| MNH | *Pisaster giganteus* | Channel Ids., California | 6/21/05 | CI99-10 | n/a |
| MNH | *Pisaster giganteus* | Channel Ids., California | 6/21/05 | CI-99-6 | n/a |
| MNH | *Pisaster giganteus* | Channel Ids., California | 6/21/05 | CI-99-6 | n/a |
| MNH | *Pisaster giganteus* | Rodes Reef, Channel Ids., California | 8/15/98 | dive 1 | n/a |
| MNH | *Pisaster ochraceus* | Fourneys, Channel Ids., California | 8/14/98 | Dive 3 | n/a |
| MNH | *Pisaster ochraceus* | Fourneys, Channel Ids., California | 8/14/98 | Dive 3 | n/a |
| MNH | *Evasterias sp.* | 63 ft. Pinnacles, Channel Ids., California | 8/14/98 | Dive 2 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/5/48 | LACM 1948-004 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/5/48 | LACM 1948-004 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/5/48 | LACM 1948-004 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/4/48 | LACM 1948-003 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/4/48 | LACM 1948-003 | n/a |
| MNH | *Pisaster ochraceus* | Marin Co., California | 8/4/48 | LACM 1948-003 | n/a |
| MNH | *Pisaster ochraceus* | Sonoma Co., California | 7/26/49 | LACM 1949-010 | n/a |
| MNH | *Pisaster ochraceus* | Sonoma Co., California | 7/26/49 | LACM 1949-010 | n/a |
| MNH | *Pisaster ochraceus* | Sonoma Co., California | 7/26/49 | LACM 1949-010 | n/a |
| MNH | *Pisaster ochraceus* | Tamalas Bay, California | 11/29/48 | LACM 1948-039 | n/a |
| MNH | *Pisaster ochraceus* | Tamalas Bay, California | 11/29/48 | LACM 1948-039 | n/a |
| MNH | *Pisaster ochraceus* | Tamalas Bay, California | 11/29/48 | LACM 1948-039 | n/a |
| MNH | *Pisaster ochraceus* | Indian Beach, Trinidad Bay, Humboldt Co., California | 6/27/94 | n/a | 1994-74.1 |
| MNH | *Pisaster ochraceus* | Indian Beach, Trinidad Bay, Humboldt Co., California | 6/27/94 | n/a | 1994-74.1 |
| MNH | *Pycnopodia helianthoides* | Monterey Co., California | 2/3/47 | 1587-47 | n/a |
| MNH | *Pycnopodia helianthoides* | Monterey Co., California | 2/3/47 | 1587-47 | n/a |
| MNH | *Pycnopodia helianthoides* | Monterey Co., California | 2/6/47 | 1592-47 | n/a |
| MNH | *Pycnopodia helianthoides* | Monterey Co., California | 2/6/47 | 1592-47 | n/a |
| MNH | *Pycnopodia helianthoides* | Monterey Co., California | 2/6/47 | 1592-47 | n/a |
| MNH | *Pycnopodia helianthoides* | Arena Cove, Pt. Arena, Mendocino Co., California | 7/6/10 | n/a | 2010-13.1 |
| MNH | *Evasterias sp.* | Arena Cove, Pt. Arena, Mendocino Co., California | 7/6/10 | n/a | 2010-13.1 |
| MNH | *Evasterias sp.* | Arena Cove, Pt. Arena, Mendocino Co., California | 7/6/10 | n/a | 2010-13.1 |
| MNH | *Pycnopodia helianthoides* | South Diablo Cove, San Luis Obispo Co., California | 6/22/97 | GH SITE1 | 1997-41.2 |
| MNH | *Pycnopodia helianthoides* | Salmon Pt., California | 7/8/49 | n/a | 1949-3.32 |
| MNH | *Pycnopodia helianthoides* | Salmon Pt., California | 7/9/49 | n/a | 1949-3.32 |
| MNH | *Pycnopodia helianthoides* | Salmon Pt., California | 7/10/49 | n/a | 1949-3.32 |
| MNH | *Pycnopodia helianthoides* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pycnopodia helianthoides* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pisaster ochraceus* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pisaster ochraceus* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pisaster ochraceus* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pisaster ochraceus* | Bodega Bay, California | 7/28/49 | n/a | 1949-13 |
| MNH | *Pycnopodia helianthoides* | Cape Mendocino, Humboldt co., California | 8/6/71 | n/a | 1971-124.1 |