



Dr. Ciaran Byrne, CEO.
Inland Fisheries Ireland,
Swords,
Ireland.

Dear Dr. Byrne,

BioAtlantis Ltd. wish to inform you of our application to sustainably hand harvest *Ascophyllum nodosum* seaweed within the Clew Bay complex. Clew Bay as an SAC, represents an important area from both an environmental and sustainability perspective. Clew Bay also represents an important economic zone as it is host to a variety of activities related to fisheries, angling and tourism. Our plans to hand harvest *A. nodosum* have been developed to ensure that harvesting activities have no significant impact on:

- (a) Fisheries, angling and tourism-related activities.
- (b) Protected species and habitats in this area.

In preparing our plan, we considered the requirements and extent of the inland fisheries and sea angling resources of Clew Bay. In doing so, we have worked to ensure that the hand harvesting of *A. nodosum* by BioAtlantis does not impact on these activities. In brief, BioAtlantis have incorporated the following aspects into their plan:

- a) **Access to sites:** areas of relevance to fisheries and sea angling have been identified. The BioAtlantis plan works to ensure that these activities are un-affected by harvest of *A. nodosum*. Moreover, these sites will not be blocked in any way due to hand harvest activities (For a list of these sites and associated harvest activities, please see Appendix 1 to this document).
- b) **Charter Skippers:** Fisheries, angling and tourism-related activities of Charter Skippers in Clew Bay will be unaffected by hand harvest activities. In particular, all bases, departure points and operational areas will not be blocked or restricted in any way (see Appendix 2 to this document for details).
- c) **Catchment areas:** Burrishoole has been completely excluded from all harvest-related activities by BioAtlantis. This is due in large part to its relevance as a major European and World Index site and its importance as a habitat for migratory fish species such as trout and salmon. Lough Furnace, Lough Napransky and Lough Navroony will be completely excluded from all harvest activities.
- d) **Water quality:** The hand harvesting should have no effect on water quality.
- e) **Sustainable harvest:** Harvesting of *A. nodosum* will be undertaken sustainably to ensure maintenance of the *A. nodosum* habitat and preventing any effects on species residing within these environs.

Overall, the BioAtlantis plan has been developed with sustainability at the forefront and should work very closely in-line with the stated mission of Inland Fisheries Ireland, that is:

“To ensure the valuable natural resources of Inland Fisheries and Sea Angling are conserved, managed, developed and promoted in their own right to generate a positive return for the community and the environment”.



We welcome all comments and suggestions from of Inland Fisheries Ireland as to your views on these plans.

Your sincerely,

Kieran Guinan, PhD

Date: 03/12/2013

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Appendix I : Access to sites of relevance to fisheries and sea angling

Ten sites of significance to sea angling in Clew Bay have been identified. Six of these sites will not be subject to harvest activities either directly or indirectly (Kilsallagh, Old Head Louisburgh, Carrowmore Strand, Roonagh Quay, Bertra, Carrownisky). Of the remaining four sites, the impact of harvest activities on access to specific fishing areas, piers, causeways and sites is not significant (Rossanrubble, Inisnakillew, Westport Pier, Lecanvey Pier).

Site name (location)	Angling activities	Harvest-related activities	Impact of harvesting <i>A. nodosum</i>
Rossanrubble (53.86541, - 9.5915)	Access requirements: Fishing in a deep channel 60m from the shore. Species of interest: Thornback ray, Bull huss	Yes Harvest will occur along the shoreline in a sustainable manner.	Not significant: <ul style="list-style-type: none"> Physical access to the shore will be unaffected by hand harvest activities. <i>A. nodosum</i> does not grow 60m from the shoreline where these species are typically fished.
Inisnakillew (53.85187, - 9.6088)	Access requirements: <ul style="list-style-type: none"> Accessing the end of the causeway and shoreline further along to the right by foot. Fishing in the deep water channel along the shoreline. Species of interest: Dogfish, Thornback ray, Bull huss	Yes Harvest will occur along the shoreline in a sustainable manner.	Not significant: <ul style="list-style-type: none"> Physical access to the pier and shore will be unaffected by hand harvest activities. <i>A. nodosum</i> does not grow in deeper waters targeted for fishing.
Westport Pier (53.80282, - 9.55753)	Access requirements: <ul style="list-style-type: none"> To the pier and the inner bay. Bait point: access to lugworm and maddies at low tide. Species of interest: Mullet	Yes This pier will serve as a loading point for harvested seaweed.	Not significant: <ul style="list-style-type: none"> Physical access to the pier and shore will be unaffected. Pier will be used for standard purposes.
Lecanvey Pier (53.78340, - 9.69007)	Access requirements: Flounder, dabs, dogfish, Pollack, coalfish, whiting, rockling, mackerel.	Yes This pier will serve as a loading point for harvested seaweed	Not significant: <ul style="list-style-type: none"> Physical access to the pier and shore will be unaffected.
Bertra (53.78846, - 9.66080)	Access requirements: <ul style="list-style-type: none"> Fishing from the beach. Main channel & deep water at the end of the peninsula. Fishing at high or low water. Spinning from the end of the point. Northern side of the reef. Eastern side and high tide. Bait point for lugworm on the eastern side of the spit. Species of interest: Flounder, turbot, dogfish, bull huss, tope, ray, bass, coalfish, mackerel and whiting	No	Not significant: <ul style="list-style-type: none"> Physical access to this site will be unaffected by harvest activities.
Kilsallagh (53.77388, - 9.7323)	Access requirements: Fishing stations along the coast. Spinning over high water. Bottom fishing over clean sandy ground. Species of interest: Mackerel, Pollack, coalfish, wrasse, dabs, dogfish, ray, plaice and gurnard	No	N/A

Old Head Louisburgh (53.778315 - 9.770064)	Access requirements: Access to Pier Access to the headlands Also a bait point for lugworm and sandeel (beach south of the pier). Species of interest: Dogfish, flounder, dab, ray, mackerel, wrasse, conger, Pollack, plaice, gurr, bull huss.	No	N/A
Carrowmore Strand (53.76939 - 9.8253)	Access requirements: Access to a beach at Carrowmore (north of Louiseburgh). Pier accessed from western side of the beach. Baitpoint: sandeel on beach west of Bunowen river mouth. Species of interest: Bass, flounder, coalfish, mackerel, codling, whiting, dogfish, dabs.	No	N/A
Roonagh Quay (53.76279 - 9.9049)	Access requirements: South-west of the Pier. Species of interest: Wrasse, coalfish, Pollack, mackerel.	No	N/A
Carrownisky (53.73544 - 9.8933)	Access requirements: Access to the surf beach. Species of interest: Flounder, turbot, bass, sea trout, dog fish, ray, weaverfish.	No	N/A

Table 1: Impact of *A. nodosum* harvest at sites relevant to angling in Clew Bay.

This table lists sites of interests to angling and fishing in the complex along with the presence or absence of *A. nodosum* hand harvest activities at such sites. No significant impacts on sites of interest have been identified. Data describing sites of relevance, access, activities and species of interest were obtained from O'Reilly S and Crowley K, 2012.

Appendix 2: Charter Skippers in Clew Bay

Seven charter skippers have been identified as operating in the Clew Bay region. Hand harvest of *A. nodosum* will not restrict access of charter boats to their bases or operational areas throughout the SAC. In many case, *A. nodosum* harvesting will not take place in areas of relevance to several charter skippers. In particular, the following areas will not be subject to *A. nodosum* harvest activities: Clare Island, Inishturk, Louisburg, Roonagh point, Inish Boffin, Achill Head, Achill Beag and Bills Rocks. Several of the skippers operate throughout the Clew Bay Complex in general. While *A. nodosum* harvest will take place throughout the rocky shorelines of Clew Bay, harvest will take place in a sustainable manner. Species of interest to skippers will be unaffected by harvest activities.

No.	Charter skipper	Angling activities	Harvest-related activities	Impact of harvesting <i>A. nodosum</i>
1	Base: Clare Is. Skipper (Licence): Pauric O'Grady (210) Boat name: 'Restorick II'	Operational area: Clew Bay Mainland departures from Roonagh point. Species/activities of interest: Reef & wreck fishing. Geared for bluefin tuna anglers.	Yes Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay.	Not significant: <ul style="list-style-type: none"> Roonagh point will not be accessed during harvest.
2	Base: Westport Skipper (Licence): Austie Gill (303) Boat name: 'White Sea Horse'	Operational area: Throughout Clew Bay, including Clare Island and Inishturk. Species/activities of interest: Fishing and sightseeing. Reef, shark, skate and general inshore angling. Mackerel, Dogfish, Bullhuss, Thornback Ray, Tope, Conger Eel & Common skate, Pollack, Cod, Houting, Whiting, Ling, Red gurnard, Cuckoo Wrasse and Ballen Wrasse.	Yes Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay.	Not significant: <ul style="list-style-type: none"> Clare Island and Inishturk will not be subject to harvest activities. Physical access to the base at Westport will be unaffected. Fish species of interest will be unaffected by hand harvest activities
3	Base: Clew Bay Operational area Skipper (Licence): Francis Maye (1297) Boat name: 'M.V.Spirit'	Operational area: Clare Island and Clew Bay. Operating from Louisburg (summer) and Westport (Winter) Species/activities of interest: Shark fishing in season, general rock, reef and bottom fishing all year.	Yes Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay.	Not significant: <ul style="list-style-type: none"> Clare Island and the area at Louisburg will not be accessed or subjected to harvest activities. Fish species of interest will be unaffected by hand harvest activities
4	Base: Westport Skipper (Licence): Reg Roynon Jnr. (040) Boat name: 'Lady Helen'	Operational area: Clew Bay, Clare Island, Inishturk Species/activities of interest: Reef, shark and general inshore fishing.	Yes Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay.	Not significant: <ul style="list-style-type: none"> Clare Island and Inishturk will not be subject to harvest activities. Fish species of interest will be unaffected by hand harvest activities
5	Base: Newport Skipper (Licence): Mary Gavin Hughes (182)	Operational area: Clew Bay complex. Sails from Newport.	Yes <ul style="list-style-type: none"> Hand harvest of <i>A. nodosum</i> will occur 	<ul style="list-style-type: none"> Physical access to the base at Newport will be unaffected. Fish species of interest

	Boat name: 'Shamrock I'	Species/activities of interest: Sight-seeing & fishing trips. Species of relevance to sea angling throughout Clew Bay, Clare Island and Achill.	throughout Clew Bay.	will be unaffected by hand harvest activities
6	Base: Newport Skipper (Licence): Niall O'Boyle (222) Boat name: 'Innishoo'	Operational area: Inishbofin - Achill Head - Clew Bay Species/activities of interest: Angling at locations in Clew Bay, Clare Island, Inishturk, Inishbofin, Bills Rocks areas.	Yes • Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay.	<ul style="list-style-type: none"> • Inish Boffin, Achill Head, Bills Rocks, Inishturk and Clare Island will not be subject to harvest activities. • Physical access to the base at Newport will be unaffected. • Fish species of interest will be unaffected by hand harvest activities
7	Base: Newport Skipper (Licence): Darragh McGee (1296) Boat name: 'Whitewater II'	Operational area: Newport, Westport, Achill Beag, Roonagh Species/activities of interest: Tours, fishing, wildlife and island tours. Angling trips	Yes Hand harvest of <i>A. nodosum</i> will occur throughout Clew Bay	<ul style="list-style-type: none"> • Achill Beag and Roonagh point will not be accessed during harvest. • Physical access to the base at Newport will be unaffected. • Fish species of interest will be unaffected by hand harvest activities

Table 2: Impact of *A. nodosum* harvest activities on Charter boat activities

This table provides a list of charter skippers, their bases, operational areas and fish species and activities of interest in Clew Bay and neighbouring areas, along with the presence or absence of *A. nodosum* hand harvest activities. There are no significant impacts on sites of interest. Descriptions of charter skippers and their activities were obtained from the Irish Charter Skippers Association (2013) and Inland Fisheries Ireland (2013). See reference section for details.

References:

O'Reilly S and Crowley K, 2012. West of Ireland Sea Angling Guide, Clew Bay - North Clare. Published by Inland Fisheries Ireland. Web: <http://www.fisheriesireland.ie/Download-document/315-West-of-Ireland-Sea-Angling-Guide-Clew-Bay-North-Clare.html> (accessed on 25/11/2013)

Irish Chartered Skippers Association (2013). Members of the Irish Charter Skippers Association <http://www.irishcharterskippersassociation.ie/members.html> (accessed 25/22/2013).

Inland Fisheries Ireland (2013). Irish Charter Boat Directory (Charter Boats in Co. Mayo). <http://www.fishinginireland.info/charterboats/mayo.htm> (accessed 25/22/2013).