



# Products from Waste Fishing Nets

Accessories, Clothing, Footwear,  
Home Ware, Recreation

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& Soren Femmer Jensen

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[www.circularocean.eu](http://www.circularocean.eu)



Northern Periphery and  
Arctic Programme  
2014–2020



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# Circular Ocean

In pursuit of innovative and sustainable solutions for marine plastic waste, the Circular Ocean project seeks to inspire enterprises and entrepreneurs to realise the hidden opportunities of discarded fishing nets and ropes in the Northern Periphery & Arctic (NPA) region.

As increasing levels of marine litter is particularly pertinent to the NPA region, the Circular Ocean project will act as a catalyst to motivate and empower remote communities to develop sustainable and green business opportunities that will enhance income generation and retention within local regions.

Through transnational collaboration and eco-innovation, Circular Ocean will develop share and test new sustainable solutions to incentivise the collection and reprocessing of discarded fishing nets and assist the movement towards a more circular economy.

Circular Ocean is led by the Environmental Research Institute, [www.eri.ac.uk](http://www.eri.ac.uk) (Scotland), and is funded under the European Regional Development Fund (ERDF) Interreg VB Northern Periphery and Arctic (NPA) Programme <http://www.interreg-npa.eu>. It has partners in Ireland (Macroom E [www.macroom-e.com](http://www.macroom-e.com)), England (The Centre for Sustainable Design [www.cfsd.org.uk](http://www.cfsd.org.uk)), Greenland (Arctic Technology Centre [www.artek.byg.dtu.dk](http://www.artek.byg.dtu.dk)), and Norway (Norwegian University of Science and Technology [www.ntnu.edu](http://www.ntnu.edu)).



The Centre for Sustainable Design\*

ARCTIC TECHNOLOGY CENTRE



Disclaimer: All reasonable measures have been taken to ensure the quality, reliability, and accuracy of the information in this report. This report is intended to provide information and general guidance only. If you are seeking advice on any matters relating to information on this report, you should contact the ERI with your specific query or seek advice from a qualified professional expert.

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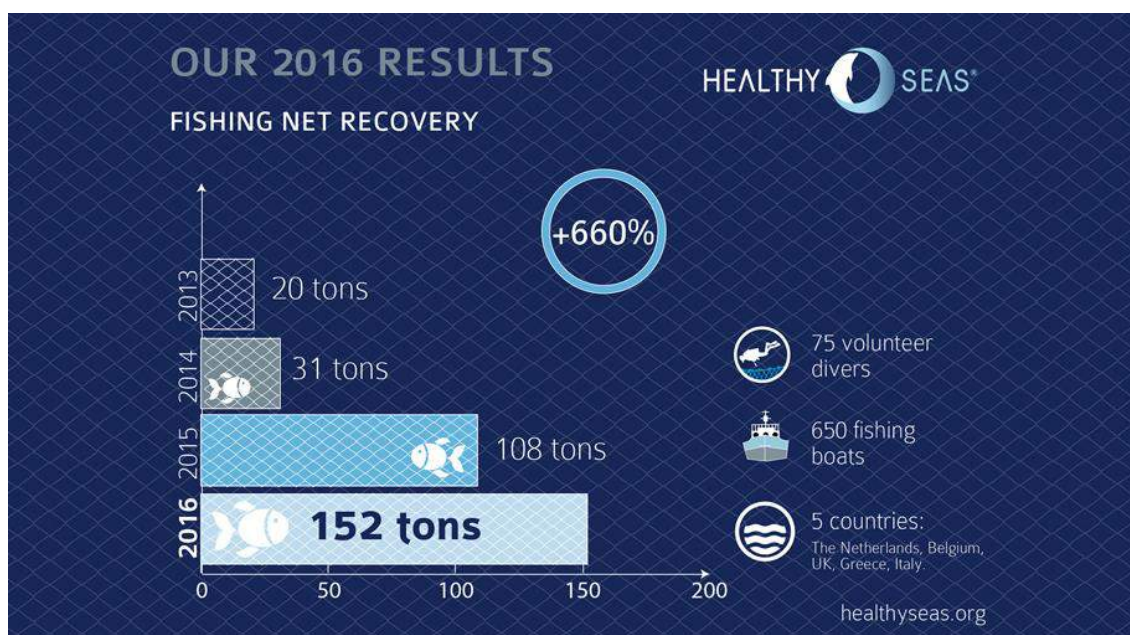
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## Cases - overview

Products	Company	Country	Employees	Website
Sunglasses	Karün	Chile	11-50	<a href="https://eu.karunworld.com">https://eu.karunworld.com</a>
Bracelets	Bracenet	Germany	1-5	<a href="https://bracenet.net/en/">https://bracenet.net/en/</a>
Bracelets, Necklaces, Keychains, Dog Leashes	Planet Love Life	US	1-5	<a href="https://www.planetlovelife.com/">https://www.planetlovelife.com/</a>
Bicycle Accessories	Kettle Core Enterprises	US	1-5	<a href="http://kettlecoveenterprises.com">http://kettlecoveenterprises.com</a>
Bicycle Accessories	Axiom	Canada	1-5	<a href="http://www.axiomgear.com/">http://www.axiomgear.com/</a>
Socks	Teko	UK	10-15	<a href="https://www.tekoforlife.co.uk/">https://www.tekoforlife.co.uk/</a>
Outdoor Clothing	Klattermusen	Sweden	11-50	<a href="https://www.klattermusen.com">https://www.klattermusen.com</a>
Clothing, Socks, Swimwear	Ecoalf	Spain	11-50	<a href="https://ecoalf.com/">https://ecoalf.com/</a>
Swimwear	Rubymoon	UK	1-10	<a href="http://rubymoon.org.uk">http://rubymoon.org.uk</a>
Swimwear	Auria	UK	1-10	<a href="http://www.auria-london.com/">http://www.auria-london.com/</a>
Footwear, Swimwear	Adidas	Germany	60,000+	<a href="http://www.adidas.com/us/parley">www.adidas.com/us/parley</a>
Shoes, Boots	Verdura	Italy	1-10	<a href="https://verdura.myshopify.com">https://verdura.myshopify.com</a>
Carpet Tiles	Interface	US/UK	3,000+	<a href="http://www.interface.com/">http://www.interface.com/</a>
Carpet Tiles	Milliken	US	7,000+	<a href="http://www.millikencarpet.com">http://www.millikencarpet.com</a>
Mats	The Maine Coast Rope Rugs	US	1-5	<a href="https://mainecoastroperugs.com">https://mainecoastroperugs.com</a>
Mats	A Frayed Knot	UK	1-5	<a href="https://www.facebook.com/Afrayedknot">https://www.facebook.com/Afrayedknot</a>
Skateboards, Surf fins, Board Games, Frisbees	Bureo	Chile/US	1-10	<a href="https://bureo.co">https://bureo.co</a>
Fishing Gear	Fishpond	US	1-10	<a href="http://fishpondusa.com">http://fishpondusa.com</a>
Garden Accessories	Kettle Cove Enterprises	US	1-5	<a href="http://kettlecoveenterprises.com">http://kettlecoveenterprises.com</a>

# Introduction

Some 640,000 metric tons (705,000 tons) of fishing gear are lost or discarded in the ocean every year and annually this gear captures and kills an estimated 136,000 seals, sea lions and whales. Start-up companies capable of collecting and recycling old gear and turning it into market-ready products have recently emerged to help tackle the problem. Figure 1 below gives an example of volume of fishing gear retrieved by an NGO, Healthy Seas in 2016.



**Figure 1**

Source: [http://healthyseas.org/assets/uploads/2017/02/2016-results\\_A4.png](http://healthyseas.org/assets/uploads/2017/02/2016-results_A4.png)

[Accessed 26 September 2017]

Fishing gear<sup>1</sup> presents a growing waste management challenge and when managed poorly contributes to the accumulation of waste plastics in the marine environment. This internet-based research, undertaken between November 2016 and October 2017 searched for products reusing or using materials from fishing gear (nets, ropes and components). Products were only included if they indicated that they were explicitly or partially sourced from waste fishing gear; as it was found that a number of products promoted as using waste fishing gear appear to be derived from general waste marine plastic. It was generally difficult to assess the proportion of recycled polymers used in the products that derived from waste fishing gear compared to the overall amount of recycled polymers

<sup>1</sup> Fishing gear is used to define waste fishing nets (ropes and components (FNRC))

used. Solutions on the market predominantly consist of consumer accessories, clothing, footwear, homeware and recreational products that are made or part made utilising polymers recovered from the reprocessing of fishing gear and/or the repurposing or upcycling of fishing gear.

The report is intended to highlight commercially available products that have re-used *used* fishing nets, ropes and/or components (FNRCs) or recycled polymers from FNRCs; and to inspire eco-innovative start-ups to develop, make and manufacture new solutions. Each section provides details of existing products and links to further information including maker/manufacturer details.

As can be seen in the overview table on page 5 the market mainly consists of microbusinesses and SMEs with just a few large companies present. Most companies and products appear to have been launched during the last decade and there are clear indications there is space for new products and start-ups to enter the market utilising *used* FNRC.

If you are interested in transforming used fishing nets, ropes and components (FNRCs) into new products, you can find additional information on eco-innovation for start-ups and SMEs in a report on [www.cfsd.org.uk/projects/circular-ocean](http://www.cfsd.org.uk/projects/circular-ocean)

# Accessories

## Sunglasses

### Karün – Chile and Sweden

Karün was founded in 2012 and is headquartered in Santiago, Chile, with offices in Stockholm, Sweden. Karün comes from the Mapuche language and it means "to be nature." The company's philosophy is based on respect for the environment and local cultures, and is committed to innovation and sustainable development and is a certified B-Corporation.

Karün produce the Kayu, Newen and Yuco sunglasses (see below) that are made entirely from Bureo's Net+Positiva plastic, derived from 100% recycled and recyclable nylon fishing nets. Once collected by Bureo, the nets are washed and prepared for a mechanical recycling process. Within this process, they are shredded and fed through a 'pelletizer', where they are melted and cut into small recycled pellets. These pellets are then injected into steel moulds to form the products, with no added dyes or chemical coatings. The glasses are fitted with Carl Zeiss Polarized lenses.

Part of the sales revenue is used to support Bureo's recycling programmes in Chile that provide resources and education to low income fishing communities affected by discarded fishing nets. The sunglasses include a take-back scheme with a reward for returned broken and/or worn out sunglasses.

Website: <https://eu.karunworld.com/collections/7-seas-collection> [Accessed 25 September 2017]

Video: <https://www.youtube.com/watch?v=n5wDaSXnm7M>

Email: [europe@karunworld.com](mailto:europe@karunworld.com)

Telephone: 0046 (0)76-898 36 85

The Kayu-Ocean



The Yuco-Ocean



The Newen-Ocean





# Bracelets

## Bracenet - Germany

Bracenet makes unique wristbands from waste fishing nets. In partnership with Healthy Seas they retrieve fishing nets from the ocean and send them to Nofir AS a Norwegian company which prepares nets to produce bracelets – the Bracenet. Two workshops that employ disabled people in Germany are involved in the production process. 10% of the sales is distributed to Healthy Seas.

Each bracelet is handmade and unique and can differ slightly in size due to the different fishing net mesh quantity and sizes e.g. around 5mm thick from ghost nets made out of HDPE (high-density polyethylene). Bracenet help customers make a personal and unique statement about the protection of the oceans.

Website: <https://bracenet.net/en/> [Accessed 25 September 2017]

Email: [hello@bracenet.net](mailto:hello@bracenet.net)

Telephone: 00 49 (0) 40 555 712 32



**Planet Love Life - US**

Planet Love Life was founded in 2014 by Rob and Brittany Webster. The husband and wife team were directors of an outdoor educational programme located in the Bahamas that hosted students from the US. One element of the educational programme involved a micro beach clean-up along with a classroom discussion on the negative effects that each collected item has on the environment. The concept of a "marine debris awareness" bracelet was inspired by a discussion between students and educators.

Planet Love Life is also actively trying to prevent marine debris by supporting the recycling and re-purposing of used lobster pot ropes. The lobster pot rope bracelets are made from rope that was used by lobster fishermen in Maine, US.

This rope is approximately 3mm in diameter and comes with a stainless steel lobster claw and brass spring ends with a zinc plated silver finish. Bracelets are made from salvaged fishing nets and ropes. The majority of material is collected during beach clean-up projects and specific programmes are organised in Florida and the Bahamas.

Website: <https://www.planetlovelife.com/> [Accessed 25 September 2017]

Email: [info@planetlovelife.com](mailto:info@planetlovelife.com)

Telephone : 001 844 373 5683



## Necklaces

### Planet Love Life – US

Planet Love Life necklaces are handcrafted using recycled fishing rope collected during beach clean-up projects. Necklaces incorporate colourful glass rings made from recycled bottles. Planet Love Life works with a local artisan on the island of Eleuthera in the Bahamas who collects bottles on the beach and from local restaurants and makes the glass rings.



Website: <https://www.planetlovelife.com/> [Accessed 25 September 2017]

Email: [info@planetlovelife.com](mailto:info@planetlovelife.com)

Telephone : 001 844 373 5683

## Keychains

### Planet Love Life – US

Planet Love Life creates stylish and colourful "Marine Debris Awareness Keychains" from derelict fishing gear in various colours collected during beach clean-up projects. 20% of the sales of each keychain are distributed to conservation projects and beach clean-ups.



## Dog Leashes

### Planet Love Life - US

Planet Love Life offers limited edition dog leashes made from derelict fishing gear collected during beach clean-up projects. 20% of the sales of each bracelet are distributed to conservation projects and beach clean-ups.

Website: <https://www.planetlovelife.com/> [Accessed 25 September 2017]

Email: [info@planetlovelife.com](mailto:info@planetlovelife.com)

Telephone : 001 844 373 5683



## Bicycle Accessories

### Kettle Cove Enterprises - US

Kettle Cove Enterprises is a craft manufacturer of bicycle baskets using lobster trap components. A quote from Jim founder of Kettle Cove Enterprises gives some background on the development of the bicycle baskets: *"I am a mechanical engineer, avid bicyclist, and part-time lobsterman on the beautiful coast of southern Maine. The idea for the Trap Basket came to me one day in 2013 after commuting home from work on my bike. I sometimes need to carry things when commuting and running errands, and my backpack is not always the best method. I have seen people using different types of bike baskets, but the ones I had seen were permanently mounted to the bike. I have also seen fabric bags that can be removed from the racks, but they did not seem large enough to hold a significant amount of cargo. I figured if I used my lobster trap materials to make a basket, and also came up with a way to easily remove it from the rack - well, that's the best of both worlds. After many versions and lots of road testing, the result is the Trap Basket! It is rugged and simple to use. I*



*make them right here in Maine, using materials from Maine and New England. The Trap Basket - It is a way to have a piece of Maine with you, wherever you are. I know you will enjoy it!"*

The Removable Front Trap Basket is made to haul cargo on a bicycle and is both lightweight and rugged.

Website: <http://kettlecoveenterprises.com> [Accessed 27 September 2017]

Email: [info@kettlecoveenterprises.com](mailto:info@kettlecoveenterprises.com)

Telephone: 001 207 767 1754



### Axiom - Canada

Axiom Cycling Gear is a Canadian company designing cycling accessories including the use of regenerated polyester yarn made from discarded fishing nets.

Axiom buys discarded fishing nets collected by fishermen and others, and then breaks down the nets into individual components and removes all heavy metals, harsh dyes and volatile organic compounds (VOC's). The nets are regenerated into polyester yarn in nylon producer Hyosung's processing facility in South Korea and is then sent to Qingdao in China for manufacturing and turned into Axiom Cycling Gear bags.

Axiom Cycling Gear is a partner of The Global Ghost Gear Initiative.

Website: <http://www.axiomgear.com/> [Accessed 28 September 2017]

Email: [chrisc@livetoplaysports.com](mailto:chrisc@livetoplaysports.com)

Telephone: 001 604 552 2930



# Clothing

## Socks

### Teko - Scotland

Teko socks design was established by Gordon Fraser - an internationally acclaimed sock and footwear designer - who has been working in the field of biomechanics and physiology of the foot and ankle for over 25 years. Teko Socks are made using 100% regenerated polyamide (nylon) from rescued fishing nets and other waste material that are regenerated in Aquafil's Econyl® Regeneration Plant in Slovenia.

Website: <https://www.tekoforlife.co.uk/> [Accessed 28 September 2017]

Email: [info@tekoforlife.co.uk](mailto:info@tekoforlife.co.uk)

Telephone: 00 44 131 317 0200

The Teko Graduated Compression socks are designed for running, cycling and CrossFit to enhance calf muscle stability and blood circulation. They are made from 90% regenerated polyamide, 10% elastic.



The Teko Off Road Running Socks are made from a polyamide (nylon) recycled from commercial fishing nets.



# Outdoor Clothing

## Klattermusen – Sweden

Klattermusen is a Swedish outdoor clothing company with product lines including waterproof jackets, pants and back packs made 100% from recycled polyamide. The polyamide is created from post-industrial waste including packaging materials from factories, old carpets as well as discarded industrial fishing nets. In 2009 Klattermusen introduced nylon from recycled fishing nets in all back packs.

Website: <https://www.klattermusen.com/en/standard/recycled-polyamide>

[Accessed 28 September 2017]

Email: [marketing@klattermusen.se](mailto:marketing@klattermusen.se)

Telephone: 00 46 647 618 618



## Ecoalf – Spain

Spanish company Ecoalf uses yarn from recycled fishing nets to produce fabrics, tailored clothes and accessories. Through the Ecoalf Foundation - as part of the EC funded project Upcycling the Oceans (<https://ecoalf.com/upcycling-the-oceans>) - ocean plastic waste and discarded fishing nets were recovered in collaboration with fishermen and transformed into

new products. Upcycling the Oceans started in September 2015 in the Mediterranean Coast of Levante (Spain) and Ecoalf claims to have recycled more than 80 tons of fishing nets to date.

See also section on Swimwear for Ecoalf swimsuit products.

Website: <https://ecoalf.com/gb/recycled-fabrics/fishing-nets/> [Accessed 28 September 2017]

Email: [contacto@ecoalf.com](mailto:contacto@ecoalf.com)

Telephone: 00 34 917 374108





# Swimwear

## Adidas – US

Adidas claims that 50% of all its swim apparel is made from recycled material and 76% of its Pool collection incorporates recycled polyamide (nylon). Some of the yarn features Parley Ocean Plastic™ which is made from recycled plastic waste recovered from from beaches and coastal areas. The company hopes to eventually recycle all its swimsuits. The swimsuits are made from 80% recycled nylon: 20% elastolefin fibre.

Website: <http://www.adidas.co.uk/swimming> [Accessed 28 September 2017]

Email: [Laura.Baum@adidas.com](mailto:Laura.Baum@adidas.com)

Telephone: 00 49 9132 84 75508



**RubyMoon - UK**

RubyMoon Design Community Interest Company Ltd produces ethical and sustainable swimwear for women from Aquafil's Econyl®, recycled nylon yarn made from discarded fishing nets. 100% of net profits are lent out as small loans to empower women entrepreneurs. To date, Ruby Moon has made 170 loans empowering families, communities, and women in 12 different countries.

Website: <http://rubymoon.org.uk> [Accessed 28 September 2017]

Email: [hello@rubymoon.org.uk](mailto:hello@rubymoon.org.uk)

Telephone: 00 44 (0) 7502 382534

**Auria - UK**

Auria is a UK based sustainable fashion brand. Auria swimwear is handmade in England using recycled fabrics, some of which are made from Aquafil's Econyl®, a fibre made from discarded fishing nets and other nylon waste. Auria has collaborated with the Net-Works programme [www.net-works.com](http://www.net-works.com) that collects fishing nets in the Philippines.

Website: <http://www.auria-london.com/> [Accessed 19 October 2017]

Email: [diana@auria-london.com](mailto:diana@auria-london.com)

Telephone: 00 44 782 481 4042



**Ecoalf – Spain**

Ecoalf is a Spanish fashion company with a sustainable profile. Ecoalf make swimwear from a 100% recycled fabric made from discarded fishing nets. They also use recycled nylon from fishing nets for their jackets (see section on outdoor clothing).

Website: <https://ecoalf.com/gb/recycled-fabrics/fishing-nets/> [Accessed 28 September 2017]

Email: [contacto@ecoalf.com](mailto:contacto@ecoalf.com)

Telephone 00 34 917 374108



## Footwear

### Adidas - Germany

Adidas has partnered with Parley For The Oceans to create a concept trainer made almost entirely out of ocean plastic waste and discarded fishing nets. The green wave pattern across the uppers is created from recycled gill net, which was dredged from the sea and recycled into the fibre. The rest of the upper is formed using waste plastic collected from the Maldives.

Website: [www.adidas.com/us/parley](http://www.adidas.com/us/parley)

Email: [Laura.Baum@adidas.com](mailto:Laura.Baum@adidas.com)

Telephone: 00 49 9132 84 75508



### Verdura - Italy

Verdura use different eco-friendly materials to craft stylish, comfortable footwear for women, men and kids. One of the materials used in the footwear are recycled fishing nets.

Verdura's founder Andrea spotted pieces of fishing net on the beach near his hometown of Piombino on the Italian coast. He picked one up, put his foot into it, out of curiosity, to see how strong it was and immediately recognised the shape of a sandal forming around his foot. He felt that he could make a sandal from this net, but realised he would need to soften it, to make it comfortable.

The fishing nets are cut and washed several times to soften the fabric and then dyed with natural pigments. The nets are then combined with cork for the insole, recycled rubber sole and waste leather left over from shoe production. The sole itself comes in two versions, one composed of recycled Vibram rubber soles and the other of recycled, vegetable-tanned leather.

Website: <https://www.verdurashoes.com> [Accessed 20 October 2017]

Email: [info@verdurashoes.com](mailto:info@verdurashoes.com)

Telephone: 00 39 380 476 6164



# Home Ware

## Carpet Tiles

### Interface – US/UK

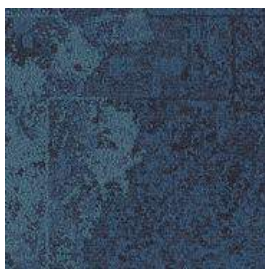
Net Effect is one of a portfolio of carpet tile collections from global carpet company Interface, that is made with yarn from the Net-Works programme [www.net-works.com](http://www.net-works.com) that collects used fishing nets. Net-Works was created by Interface in collaboration with The Zoological Society of London and provides a source of income for small fishing villages in the Philippines while cleaning up their beaches and waters of discarded fishing nets. The discarded fishing nets are collected and sold to Aquafil to produce Ecoynl®. Interface's collections also use yarn reclaimed from their ReEntry® programme that recycles used Interface carpet tiles into new carpet tiles.

Website: <http://www.interface.com/US/en-US/about/modular-carpet-tile/Net-Effect>

[Accessed 20 October 2017]

Email: [info@interface.com](mailto:info@interface.com)

Telephone: 00 44 (0)1274 690 690





**Milliken - US**

Milliken is a global manufacturer of floor coverings and uses Aquafil's Econyl® yarn within its 100% regenerated nylon to make their carpet tiles.

Website: <http://www.milliken.com/en-us/Sustainability/Pages/sustainability.aspx>

[Accessed 20 October 2017]

Email: [millikencarpet@milliken.com](mailto:millikencarpet@milliken.com)

Telephone: 001 800 824 2246

## Mats

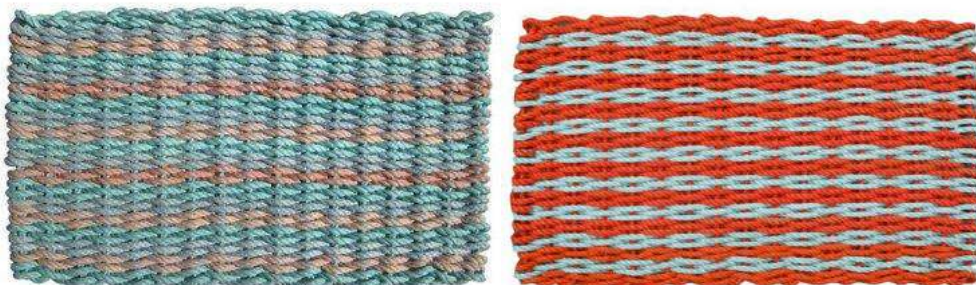
**The Maine Coast Rope Rugs - US**

Maine Coast Rope Rugs are handcrafted on the coast of Maine using recycled lobster float rope to make doormats, rugs, and runners.

Website: <https://mainecoastroperugs.com/> [Accessed 20 October 2017]

Email: [hello@mainecoastroperugs.com](mailto:hello@mainecoastroperugs.com)

Telephone: 001 207 529 2220



**A Frayed Knot - UK**

Afrayedknot uses old fishing rope mainly washed up on the shores of Orkney Scotland or donated by local fishermen and turns this into mats. Fishing net ropes are washed in a washing machine and then used to make mats. Afrayedknot also provide rope wreath making workshops where individuals can learn to make mats, doorsteps and other items from of old fishing ropes.

Afrayedknot's products are sold through a webshop powered by ETSY:

<https://www.etsy.com/shop/Afrayedknotmats>

Website: <https://www.facebook.com/Afrayedknot> [Accessed 20 October 2017]

Email: [mark.e.cook@hotmail.com](mailto:mark.e.cook@hotmail.com)

Telephone: 00 44 07855132757



# Recreation

## Skateboards

### Bureo - Chile

Bureo Skateboards designs and manufactures a unique line of skateboards that uses waste fishing nets working with from Chilean coastal communities. Bureo's recycling programme in Chile provides fishing net collection points and the products are manufactured in Chile and California. Bureo is committed to supporting the communities that they work with through their Net Positiva model and create a positive impact across its supply chain. Bureo provides financial support to local labour and participating communities, who are incentivised to keep polymer fishing nets out of the ocean. To date, programmes have recycled over 80,000 kg of discarded fishing gear. Once collected, the nets are washed and prepared for a mechanical recycling process. Within this process, they are shredded and fed through a 'pelletizer', where they are melted and cut into small recycled pellets. These pellets are then injected into steel moulds to form the products.

The Ahi is a cruiser skateboard made from recycled fishing nets. The double kicktail design includes a concave deck and gripping scale pattern. Built for durability the rigid deck maintains stability and stiffness in all riding conditions.

Website: <https://bureo.co/collections/bureo/products> [Accessed 20 October 2017]

Email: [ben@bureo.co](mailto:ben@bureo.co)

Telephone: 001 401 595 7287





## Surf fin

### Bureo - Chile

Together with company Future, Bureo has created the Alpha Series surfing fins made out of recycled fishing nets that substitute standard materials such as fibreglass or plastic injection fins. The fins are designed and manufactured by Futures in California, US using recycled plastics that are sourced from Bureo's fishing net recycling programmes in Chile.



## Frisbee

### Bureo - Chile

In partnership with Jack Johnson's summer music tour in 2017, Bureo launched the Fishnet Flyer Frisbee. A growing amount of green coloured discarded fishing nets was being stockpiled in the Bureo's workshops in Chile and these became the base material for the new Fishnet Flyer. The Fishnet Flyers are made of 80% recycled content and manufactured in California, US.

Website: <https://bureo.co/products/bureo-fishnet-flyer-frisbee>

Email: [ben@bureo.co](mailto:ben@bureo.co)

Telephone: 001 401 595 7287



# Board Game

## Bureo – Chile/US

Jenga® Ocean™ is a board game made from 100% recycled fishing nets sourced through Bureo's Net Positiva recycling programme. The game consists of blocks featuring threatened marine animals and the game play is designed to encourage players to 'Save the Animals'. Players learn about the damaging impact of discarded fishing nets on marine animals and what they can do to help.

Hand-drawn and inspired by the sea, the artwork behind Jenga® Ocean™ is the work of Lake Buckley - a surfer, designer, artist and explorer. All packaging is 100% recycled and recyclable.

Website: <https://bureo.co/products/jenga-ocean>

Email: [ben@bureo.co](mailto:ben@bureo.co)

Telephone: 001 401 595 7287



## Fishing Gear

### Fishpond - US

Fishpond produces lumbar packs, backpacks and vests that are made from 40-100% nylon recycled from commercial fishing nets.

Website: <http://fishpondusa.com/product/detail/> [Accessed 20 October 2017]

Email: [customercare@fishpondusa.com](mailto:customercare@fishpondusa.com)

Telephone: 001 303 534 3474



# Garden Accessories

## Kettle Cove Enterprises - US

Kettle Cove Enterprises is a craft manufacturer of bicycle baskets (see earlier entry) and bird feeders using lobster trap components.

The company uses lobster trap components to create the Kettle Cove Bird Feeder. It is unique, squirrel resistant, rugged and long-lasting as the components were made to work in salt water. The feeders are simple to fill and the hanger can attach on to nearly anything. The lobster trap wire is made from galvanized steel coated with poly vinyl chloride (PVC) and available in three colours (green, white, and yellow). The feeder bowl is made from galvanized steel.

Website: <http://kettlecoveenterprises.com> [Accessed 27 September 2017]

Email: [info@kettlecoveenterprises.com](mailto:info@kettlecoveenterprises.com)

Telephone: 001 207 767 1754



## References

- [http://healthyseas.org/assets/uploads/2017/02/2016-results\\_A4.png](http://healthyseas.org/assets/uploads/2017/02/2016-results_A4.png) [Accessed 26 September 2017]
- <https://eu.karunworld.com/collections/7-seas-collection> [Accessed 25 September 2017]
- <https://bracenet.net/en/> [Accessed 25 September 2017]
- <https://www.planetlovelife.com/> [Accessed 25 September 2017]
- <http://kettlecoveenterprises.com> [Accessed 27 September 2017]
- <http://www.axiomgear.com/> [Accessed 28 September 2017]
- <https://www.tekoforlife.co.uk/> [Accessed 28 September 2017]
- <https://www.klattermusen.com/en/standard/recycled-polyamide> [Accessed 28 September 2017]
- <https://ecoalf.com/gb/recycled-fabrics/fishing-nets/> [Accessed 28 September 2017]
- <http://www.adidas.co.uk/swimming> [Accessed 28 September 2017]
- <http://rubymoon.org.uk> [Accessed 28 September 2017]
- <http://www.auria-london.com/> [Accessed 19 October 2017]
- <https://www.dezeen.com/2016/06/08/adidas-trainers-parley-for-the-ocean-plastic-design-recycling/> [Accessed 20 October 2017]
- <https://verdura.myshopify.com/> [Accessed 20 October 2017]
- <http://www.interface.com/US/en-US/about/modular-carpet-tile/Net-Effect> [Accessed 20 October 2017]
- <http://www.millikencarpet.com/> [Accessed 20 October 2017]
- <https://mainecoastroperugs.com/> [Accessed 20 October 2017]
- <https://www.facebook.com/Afrayedknot> [Accessed 20 October 2017]
- <https://bureo.co/collections/bureo/products> [Accessed 20 October 2017]
- <http://fishpondusa.com/product/detail/> [Accessed 20 October 2017]
- <http://kettlecoveenterprises.com> [Accessed 27 September 2017]









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