

Basic Instructions.

## IMPORTANT

1- You must give your biosphere natural or artificial light each day to allow the vital processes to take place. Neon, fluorescent lights, ordinary light bulbs or even better, GLOBUS lamps (which can be purchased from either the UK retailer selling our products or through Globus direct) are all okay to use. It is important to ensure the lights do not make the spheres warm.

There is no scientific formula dictating the exact amount of light per day the Beachworlds need to remain healthy. If your home is very dark, we suggest five to six hours artificial light per day. If your home gets plenty of natural daylight then this is probably all the Beachworld needs. It is important to remember that if the shrimps are very orange/red and are resting on the coral, walking on the pebbles or swimming around slowly, whatever you are doing is perfect!

2- **NEVER** expose your biosphere to direct sunlight. Placing your biosphere on a window sill is fine providing it does not get direct sunlight.

3- For the first month, check your biosphere daily. Ensure your shrimps have an orange/red hue and are calm. They should be resting on the pebbles or coral. If your shrimps are almost transparent and are racing around the sphere, this probably indicates that they are getting too much or too little light. To rectify this problem, place the biosphere elsewhere within your home until you find the perfect place.

4- If you have been using artificial light to maintain your Beachworld and are going away for more than two days, either give it to a friend to care for or use a timer light.

5- During the summer place your Beachworld in a controlled temperature area between 13° and 27° C. In extreme conditions place your biosphere in a sink with water to cool it down. You can also call GLOBUS Customer Service for advice on: 0039 0182 559 495.

### Do not:

- Place your BW in direct sunlight
- Shake your BW
- Place your BW outside
- Place your BW in a room where the temperature goes above 27° or below 13°.

### Light Exposure

Bulb	Distance
40 Watt	15 cm.
60 Watt	25 cm.
100 Watt	30 cm.

Neon	Distance
Up to 30 Watt	40 cm.
More than 30 Watt	65 cm.

### Sunlight Lamp GLOBUS

**Distance between 5 and 10 cm.**

## **ABOUT YOUR BEACHWORLD**

Our planet is a closed system in which living organisms thrive: a biosphere where nothing enters or exists except sunlight. Your BW is a miniature biosphere, encapsulating the fundamental workings of our own Earth.

Inside your BW, Hawaiian shrimps known as Opae'ula (oh-pie-oola) are sustained in a marine environment. You do not have to feed the shrimps or change their water. It's the perfect pet! Nothing enters or leaves the container, such as food, air, water or waste. The only elements required are light and heat. The light causes the micro algae to produce the oxygen and food for the Opae'ula, which in turn produce carbon dioxide and nutrients for the algae to grow.

The BW gives us the opportunity to bring the beach indoors! The BW was created by a space station engineer and two of the original Biosphere2 crew members. The two Biosphere2 researchers lived and worked for two years inside the large sealed ecosystem in Arizona without leaving the structure. The glass and steel sealed building covers 3,15 acres and contains several different environments including a rain forest, savanna, desert, marsh and ocean. Columbia University manages Biosphere2, where scientists research the global changes that take place.

The creators of the BW have completed a ten day space experiment on the U.S. Shuttle and twice have done a four month experiment on board the Russian Space Station MIR with sealed closed ecosystems similar to that of the BW.

## **WHAT LIVES INSIDE YOUR BEACHWORLD?**

The residents of your BW are shrimps that are found only on certain Hawaiian islands. These shrimps are called Opae'ula (scientific name *Halocaridina Rubra*) and they inhabit the inland pools that are found in lava rock. Deep red layers of algae line the walls of these pools, along with other types of macro algae. The Opae'ula does not eat the algae, but rather maintains it, eating the micro algae and bacteria that grows on the layers of algae. They are literally the gardeners of their environment, maintaining the balance within the pools, keeping them clean so that the large algae can thrive.

In your BW you can see the Opae'ula grazing and grooming themselves and even carrying the odd piece of sand! If the shrimps are disturbed they tend to temporarily lose their bright red colour in an attempt to blend in with their background. Once they have settled they will return to their original state.

Unlike their natural habitat, there are no predators in the BW, so the life span of the Opae'ula can be extremely long - up to 10 years. They usually do not produce offspring in the BW as they like dark, secluded places in which to breed. The BW are too small to sustain an increasing number of shrimps, therefore we do not provide a breeding place. The BW is expected to live 3 years, but they have been known to live for as long as 12 years.

There is also algae in your BW, in order to help keep the water clean and provide oxygen for the Opae'ula.

## CARE INSTRUCTIONS

Setting up your BeachWorld

**STEP 1:** Take the BeachWorld immediately out of its box. Be sure that the BeachWorld is positioned the right side up. Very gently vibrate your Beachworld to free any shrimps that might be trapped under the sand during transportation.

**STEP 2:** Inspect your BW after you have taken it out of the box. Your BW might be a little cloudy for the first day or two. This will clear up.

**STEP 3:** Place your BW in a location that receives enough light . Never allow your BW to receive direct sunlight. The room temperature needs to be between 13° and 27°C.

**STEP 4:** Watch your BW closely during the first month to make sure it is in an appropriate location. Lighting is the primary consideration as long as the temperature remains within the ranges quoted in Step 3. The BW thrives in natural or fluorescent light. If there is too much light, algae will grow prolifically on the glass (however the shrimps will love it!). Whenever you change the location of your BW, check it every few days for several weeks to make sure that the location is appropriate.

**STEP 5:** Fill out your BW's registration card within 30 days and send it along with proof of purchase to Globus Scientific at the address below. On receipt of your registration card Globus will send you a guarantee/ replacement voucher for use in the unlikely event that your Beachworld dies.

## TROUBLE SHOOTING

**Algae on the glass.** A small amount of algae on the glass is good as indicates that the BW is getting ample light. However, if it becomes unsightly place the BW in an area that receives slightly less light. The algae often clears up within a few days to a couple of weeks. If it is very stubborn and does not recede in its new location after couple of weeks move it to a slightly darker location yet, or use the attached magnet to clean smoothly the glass.

**Milky water.** This is a sign of bacteria in the water. if this occurs put the BW in a well lit location for several days until the water clears up (but not in the direct sunlight).

**Dead shrimps.** Over several years the shrimps will die of natural causes. If you see several dead shrimps within your BW sometime within the first week of your having the BW this might indicate a problem during transportation. If a shrimp dies and the BW is crystal clear, there is no algae on the glass or on any of the shells in the sand, then you

probably need to give the BW a little more light. Never shake the BW as this could harm the shrimps, and even kill them.

Through the process of photosynthesis, the algae provides the shrimps with the oxygen they need to live.

**Swimming skeletons.** Inside the ecosystem you may find small transparent objects (skeletons) that look like shrimps, but which move rather slowly and irregularly. These are the discarded skins of the shrimps. The shrimps changing their skin is another proof of the animals' good state of health.

#### **GUARANTEE/REPLACEMENT VOUCHER**

In the unlikely event that the majority of the shrimps die within one year of the purchase date, you can return the product to GLOBUS International Italy for a replacement on condition that it had not been subjected to modification or misuse and that all the instructions regarding the care of your Beachworld have been observed. You **MUST** send the Beachworld guarantee card to validate your claim.

Your Beachworld will be replaced using the replacement voucher provided the customer returns the dead Beachworld to Globus International , **before return dead products contact the following number to check method of return : 0039 0182 559495 for UK 0044 (0)1892 660093 .**

(owner of Beachworld will enclose a cheque or cash or credit card details for 25 euros for shipping costs and specialised protective packing).

If the customer does not follow the instructions attached to the Beachworld, this warranty or part of it shall not apply. For further information about how to return Beachworld, as well as for any technical questions, please do not hesitate to contact GLOBUS International at fax **+39 0182 559482**; or send e-mail to **info@beachworld.it**

The costs for transport shall be borne by the customer.

This warranty is limited to the replacement of one Beachworld and does not cover any incidental or consequential damages, personal injury, loss or damages caused by the customer's or another person's use of the Beachworld.

**THIS IS A DIDACTIC PRODUCT. NOT SUITABLE FOR CHILDREN UNDER SIX YEARS. TREAT CAREFULLY.**

#### **Warranty extension.**

All our Beachworld products are guaranteed for one year. If you would like to extend this to two years please note the following:

Warranty extension for up to 15 cm diameter products, please fill the attached "Extension Warranty card" and post to Globus International, together with a cheque for 45 EURO with your registration form.

Warranty extension for more than 15 cm diameter products please fill the attached "Extension Warranty card" and post to Globus International, together with a cheque for 65 EURO with your registration form.

Warranty extension include shipping cost.

Please make all cheques payable to: Globus International srl

<p><b>CARTOLINA REGISTRAZIONE BIO-SPHERE &amp; BEACHWORLD</b> <i>REGISTRATION CARD BIO-SPHERE &amp; BEACHWORLD</i> (si prega di scrivere in stampatello)</p> <p>ATTENZIONE: La Garanzia di 365 giorni, non sarà valida se questa cartolina non verrà rispedita entro 30 giorni dall'acquisto allegando documento di acquisto fiscale. I prodotti che risulteranno morti o deperiti dovranno essere restituiti alla GLOBUS Scientific, a spese del mittente per l'esame fito-patologico del contenuto che determinerà se il prodotto è morto per cause naturali o se derivanti da alterazioni dovute a manomissioni o errata manutenzione. In tal caso non potrà avvenire la sostituzione del prodotto deperito o morto.</p> <p><i>To be resent to GLOBUS Scientific within 30 days from purchase date</i></p> <p>NOME / NAME.....</p> <p>INDIRIZZO / ADDRESS.....</p> <p>CITTA' / CITY..... CAP / ZIP.....</p> <p>STATO / NAT..... DATA ACQUISTO / PURCHASE DATE.....</p> <p>TelPh..... <b>E-mail</b>.....</p> <p>NUMERO DI SERIE / SERIES NUMBER..... (data e numero di cartolina sul fondo del prodotto - on the bottom of the products)</p> <p><b>Inviare a / Send to</b> : GLOBUS Scientific Via. Bormone, 4 * 17031 Albenga - Italy Tel. +39 0182 559 495 Fax +39 0182 559 482 info@beachworld.it</p>
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**ESTENSIONE DELLA GARANZIA  
WARRANTY EXTENSION**

NOME / NAME.....

INDIRIZZO / ADDRESS.....

CITTA' / CITY..... **Z/CP.**.....

STATO / NAT ..... DATA ACQUISTO / PURCHASE DATE.....

Tel/Ph..... **E-mail.** .....

Dichiaro di voler estendere la garanzia del mio ecosistema fino a due anni dalla data di acquisto. Allego la Cartolina di Registrazione e l'importo di € 45,00 per l'Italia.  
In caso di deperimento del mio ecosistema vi invierò il prodotto a spese mie e mi verrà restituito senza alcun costo aggiuntivo.

*I declare i would like to extend the warranty of my ecosystem for two years. I enclose € 65,00 for outside Italy.*

Per pagamenti con carta di credito o bonifico bancario contattare il Servizio Clienti.  
For payment by credit card or wire transfer please contact Customer Service.

**Inviare via posta/ Send by post to:** Servizio Clienti - Customer Service  
GLOBUS Scientific - Via Burrone, 4 \* 17031 Albenga - Italy  
Tel. +39 0182 559 495 **Fax** +39 0182 559 482  
info@beachworld.it