

## FAQs about Live Sand

a discussion hosted by Bob Fenner

### Live Sand

I was wondering about adding live sand to our 300 gallon reef tank.

We have a DAS key hole tank. We have added PVC pipe with holes and a pump to the back of the tank (on the bottom). It is not feasible for us to reset the rock on top of a framework of PVC pipe. I was wondering if we could just add the live sand to the front of our tank. I believe we would still have the good forward water flow from the back of the tank.

<Yes, this is a workable plan>

Could we add the live sand a little at a time, or is it best to add what we would need all at once. <Best all at once, or in layers... the larger grade on bottom, a layer of plastic screendoor material, then the finer, upper layer... More can be added, seeded to the top...later>

We have anemones, corals, 2 Kole tangs, mandrin goby, two red striped blennies, two lawn mover gobies, cardinals, hawks, star fish and a very nice clean up crew from ffeexpress that has really cleaned up our algae problem.

If you need more inf., I will respond after your reply.

Thanks

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Be chatting, Bob Fenner

### Live Sand

I was wanting to purchase an 80 gallon tank...I have a 55 right now and I am very pleased with how the tank is right now with crushed coral on the bottom...I was interested in using Live Sand in my 80 gallon tank that I am going to buy next week. My question is: Are there any benefits to using the Live Sand in a tank or is it mainly for the looks? Thanks in advance for your time and help.

Brandon

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Many benefits to utilizing the live sand in marine tanks... in addition to aesthetics. Food, filtration, stirring action, enhanced buffering, biomineral addition... making the system overall more viable, stable...optimized...

Bob Fenner, whose "live sand" input is further stored at [www.wetwebmedia.com](http://www.wetwebmedia.com) under that name.

### 80 gal. reef tank

Bob, I am in the process of setting up my first reef tank and need a little advise. How much sand should be put in? Should it be all live sand or a mixture of what components? The tank is 80 gallons, 48 x 17 x 24 with four 55 watt power compacta and two 175 watt , 12,000k metal halide bulbs. Thanks alot.....Robert

>>

Hmm, well, depends... on the types of livestock you intend to keep, your sensibilities of what looks good, and what you otherwise want to do with this sand bed (like is it going to be a denitrator of some sort?)...

But if it were me, I'd start off with "about" an inch (you can add more later)... maybe fifty, sixty pounds for now...

Add more if that doesn't "look" like enough... and either allow your live rock to seed it on its own, or buy a few (maybe ten) pounds of live sand to sprinkle on top, once you get about the amount you want in of the "non-live" sand.

Bob Fenner, whose live sand input can be found at [www.wetwebmedia.com](http://www.wetwebmedia.com) in greater detail.

### My new 125 reef

Bob,

I emailed you last week about moving a sandbed. Your advice, as always, proved to be sound. I moved everything (not all the sand) from the 50 into the 125 without any problems, not even any complications, and the results turned out to be greater than I imagined they would. Check it out (the new pictures are at the bottom of the page):

<http://mindspring.com/~dlos/125.htm>

Thanks again,

Dave

>>

Ah good, and very nice to have different angle views of the system... One suggestion re the website, do consider "resampling" (and hence down-sizing) your images to expedite downloading.

Bob Fenner

### **adding live sand**

currently i have a 55 gal. reef tank and is doing quite well. i want to add some live sand to the tank. i currently have gravel right now. i was wondering how much do i need, and if i should remove the gravel from the tank? should i take out all of the gravel or only some?

>>

Hmm. let's see, about four square feet of bottom... about ten pounds... Do you have live rock? I might add some of that about now as well.

Bob Fenner

### **sand stirring**

First I must Comment about how much I enjoy you colum. I'm setting up a 29 gal. reef as I write I am using a live sand bed. I would like to know what the best fish/invert is for keeping the sand stirred.

Thanks, Charles Willis

>>

It is an honor and a privelege to serve the folks and their livestock through and with this forum... and very much a fun and educational "job" for me...

For this size system, I would use something in the way of a small species of goby... Maybe a Phalaena or Amblygobius... after it's been up a good three months... I would have to skip some of my favorite Valencienea spp. due to the likelihood of starvation, and the same for seastar species that might do well in a bigger system... As well as my favorite over-acheivers in the way of bottom searching, the Goatfishes (family Mullidae).

Bob Fenner

Would there be anything wrong with using Florida beach sand in my 55 gal FO + Invert tank? Current substrate is a thin layer of crushed coral. Will there be an ammonia or nitrate spike if I replace all at once?

Thank you for a wonderful column!

Scott

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Nothing probably wrong, given careful screening of the raw material for bits of metal... and a brisk rinse (freshwater is fine) to remove fine material and "excess" living things... And yes to the likelihood of having something in the way of a break in period/incident... as with live rock, other live sand... monitor for this and hold off on stocking till all settles in.

Bob Fenner

### **Live Sand Question**

Would there be anything wrong with using Florida beach sand in my 55 gal FO + Invert tank? Current substrate is a thin layer of crushed coral. Will there be an ammonia or nitrate spike if I replace all at once?

Thank you for a wonderful column! Scott

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Likely there will be some problems... but these can be minimized by doing a bit of work: After collecting the new sand, screening/sifting it with two grades of material: one larger the lower smaller... to yield all about the same grain size... and then thoroughly checking through the sand for "tramp" metal and other contaminants... sort of like seiving through a natural dried bean product to look for sticks, stones...

And then placing the sand where it will be used, without livestock present and curing it by running your filtration and checking aspects of nitrogen cycling...

There are many specifics left out here for brevity... questions, concerns, suggestions... please write back.

Bob Fenner

### **Which one?**

Hi Bob,

Just wanted to say thanks for all your advice. I'm going with Turboflotor.

I read your book and I'm following your recommendations. You didn't get into the Live sand bed issue as deeply as I would have liked. This is my next decision to make.

<Please tell me you're either a book publisher or an eccentric millionaire! I have "The Conscientious Reef Aquarist", "The Best Livestock for Your Reef Aquarium".... and a few other titles "done"... but no one else to help at this point... The book you're referring to is CMA no doubt... It was finished in late 95... remember that century? And the live sand issue then was... tiny?>

Do you have any experience with the Jaubert method? I really don't want to use this method, for the simple reason that it make the tank look lousy!! You see about 5 inches of substrate on the bottom of the tank. Will 2-3 inches of sand provide you with the same effect? Does the bio-load you have make one method better than the other? What type (size) substrate would you recommend? I love the look of fine sand. But is this a detriment to the tank's filtration? Maintenance? Inhabitants?

<Yep. Have met the man himself,,, been to Monaco... Two/three inches of two, finer graded substrates will do enough good... almost as much as deeper beds. Bio-load does have an effect... if it's too great... you'll "pile up" nitrates more than if the load were smaller... The lower section (about two of the three inches) about 1/8" inch diameter, the upper 1" about 1/16"... with a screen between. Fine sand is fine... if not too deep, and the more consistent the grade, and more spherical, the better. Maintenance? I'm a stir and gravel vacuum proponent... one side of the tank every two weeks to a month.. just the upper bed... A drain underneath is nice to exit some of the plenum water once a month or two... and (here's the big groan part) taking the whole thing down and re-doing it every year or two... This is why I like to remote such NNR (natural nitrate reduction) systems to sumps...

Bob Fenner

### **Live Sand vs. CaribSea sand.**

With my first reef (unsuccessful, due to ME!) I had used the CaribSea reef grade aragonite. Put in 30 lbs of live rock, and within a few months had

all kinds of worms and weird stuff crawling through the sand. Was this "Live Sand"? Would a few pounds of live sand be a good idea to get important critters in the rest of the sand bed?

I installed a plenum after six months with the tank running fine (I got caught up in all the plenum hype) . After six more months, I was getting the same readings as I had before. It seemed like a waste of time installing the plenum, and I ended up with an unattractive tank (thick sand layer). Any and all advice is greatly appreciated.

Thanks again,  
Tony

>>

I am going to setup a 6' x 2' x 20 " (150g) aquarium with 170 pounds fiji live rock and about 200 pounds fiji live sand for a fish only (probably convert to reef in couple of years). Should I place both rock and sand in the aquarium the same day? If so, should I put rock in first or the sand?

Are my quantities for both okay or should I modify them? Thank you for any recommendations you may have. Lex

>>

Hmm, well, the sand goes in first in my opinion... and practically in most everyone else's... And/but I myself would not buy much live sand or any at all... unless I really liked the looks of the imported material... instead, I'd just let the live rock seed the sand... this will happen... and results in about the same effect functionally... as much of the desirable life in imported "live sand" is actually "made" this way... You can place the live rock on top of the sand, live at the get go or not, on the same day.

Bob Fenner

### **Live Sand**

Hi Bob,

Two weeks ago I got a shipment of your live rock, very happy with this purchase since it was my first. The system that I have started is a 33 gallon long ( 48 inch ) reef. I have forty pounds of the cured fiji premium live rock in the tank now. How much live sand should I order to get a sufficient base. And should I mix the coarse at the bottom moving to medium and then topping off with fine. Also what is your take on adding reef rubble in with the coarse live sand.

Regards, Louis

>>

Well, if it were me, I'd utilize the live rock to make my own live sand (this is how much of the "live sand" is made... even in the South Pacific... for shipping to the west). "Just" rinse and place the coarse (maybe #5, or, let's say 1/16" on up in diameter) material on the bottom, around your rock... and yes to the rubble if it suits your artistic eye, and nah to the fine(r) sand on top (this will/would just get mixed in anyway... and possibly cause problems later). Your "sterile" new sand will soon be "live" in a few weeks from "recruits" from the live rock.

Bob Fenner, who says, there are occasions, types of systems that can/do benefit from "purchased" live sand, but most folks can do very well by the above method.

### **Burrowing Baby Brittles**

baby brittle stars and other goodies in my current sand bed. Do I need to worry about burying them too deep if I add the new sand all at once? Do I have to add the new sand in stages? I would rather do it all at once, but I fear I will bury much of my live detritivores by adding all of the sand at once.

>>

Good question... I share your concern. If it were me, I would add the sand (washed) a bit at a time (like ten pounds, or a gallon or so) each water change... There's much to be gained by going slower here... and nothing to be lost by taking your time.

Bob Fenner