



It looks archaic, and a little funky too—with the second top tube and all. The kickstand is almost humorous, sure. But this is as good as a mountain bike gets. Everything is purposeful, nothing is extra, and it's ready for any terrain you have any business pedaling a bike over. It would never sell in a bike shop.

The *Bombadil*. The most unlikely bike of its time.

When you make a mountain bike in 2009, there are way more considerations than there were in 1984. Brake type, suspension, materials, fork travel—a caucaphonious kaleidoscope of options!

The Bombadil plan, from the start, was a super strong, dang-da-weight frame that would make the normal modern mountain bike look like a high tech wuss. A bike that in the year 2160 would be regarded as the jewel of the early 21st century mountain bikes, a beacon of sensibility—and besides that, still fully functional, and with somebody still riding it every everlovin' day.

It came out right and is everything we wanted it to be. It's steel; it's lugged; the frame and fork has no moving parts; the tube diameters are right out of the early '80s and give it that boney look we like so much. And it uses a quill stem, for all that adjustability. There's just nothing stupid or trendy about it.

The tubes are extrastrong, thicker here and there than Atlantis tubes. The down and top tubes are straight-gauge, because straight gauge makes more sense there, for this kind of a bike. It was not, for the love of Zeus, a cost-cutting measure (if we wanted to do that, we wouldn't have made this bike in the first place). There's a lug extension brazed on just behind the bottom head lug on the underside of the top tube—the most vulnerable part of the frame—for extra crash resistance in a front-end impact. Those kill lots of frames.

In the earliest stages, I was firm in wanting it to be super strong, & let the weight fall where it may. I figured we could sell twenty-five Bombadils, and I didn't care whether we sold more than that. It wasn't going to be a main player in our line, and there are worse things than having a dozen super stout steel mountain bikes unsold in the warehouse. I and a few others who work here would ride one, and some others eventually would, in twenty years or something. In the meantime a small bellyflop like this wouldn't kill us.

But the Bombadil is lighter than I'd hoped (proving that an extra 0.1mm of

tube wall thickness doesn't add much weight). The first prototypes, made by Toyo (our builder in Osaka, Japan) weighed less than five pounds, or a hair less than a high quality touring frame weighed in the early '70s. For the Bombadil—a super sturdy mountain bike—to weigh less than a good old touring bike was disconcerting.

The Bombadil's most obvious freaky feature is its second top tube. The 48 doesn't have one, doesn't need one, there's no room for one, and is already the way the others are trying to be without one. On the bigger frames, this second top tube restores triangulation (and hence, strength) to the main frame of the bike. All structural engineer-wannabes know a triangle is magic in the way it distributes stress and maintains its shape under loads that would collapse any other shape. That's why electrical towers, bridges, loading cranes, & every load-bearing structure & building in the world is made of triangles. When you can't see them, it's because they're covered. But if you could snap your fingers & turn those triangles into squares, rectangles, pentagons and hexagons, those structures would collapse in a heap of dust the likes of which hasn't been seen for 65 million years.

Now, most modern bikes are generally well-enough triangulated even when the head tube mucks up the perfect triangulation. If that weren't the case, only dinky bikes would survive. But the next time you're in China or India, look at the poorly made cheap bikes of bad metal that tote wood and livestock loads that often exceed 100 pounds every day on lousy roads, yet roll on year after year: The ones that last have double top tubes, because the ones with single top tubes went extinct. No disrespect intended (by the "cheap bikes comment"); those bikes do good service, but once you're finished exalting them for the lowly good work they do, it's not the way to make a fine bike.

The Bombadil is an expedition mountain bike that is light enough to be a practical do-all bike for anybody who's given up lycra for good. In the bigger



This lug extension reinforces the part of the down tube that's most vulnerable when you ride into something immovable. Any lug strengthens this area and protects the joint better than, say, a tiny tig-weld—because the closer to the actual joint, the more the stress. But when you smack really hard, the portion behind the lug can buckle, and brazing on this piece all but prevents that. The stress decreases with distance from the head tube, and the idea here is that there's not much stress left at the end of the extension—3 inches or so from the head tube.

sizes, it's replacing the 64cm and bigger Atlantis frames—because we have limited space and money and can't handle the ultra duplication.

We've been riding Bombadil (including prototypes) since late 2007 now, and it is a delightful bike, as comfortable or more than any bike in our line. That's largely due to the high handlebars, a result of the "expanded" frame style, which you can read about later in this issue. It is all we wanted it to be.

How To Size the Bombadil

(PBH = Pubic Bone Height; SH = Saddle Height; cm = centimeters)

Size	cm	Standover w/52mm tire	PBH	SH range
S	48	75.7	77 - 83	76 - 83
M	52	79.6	82 - 87.5	72 - 78
L	56	83.5	85 - 90	75 - 80
XL	60	89.5	89 - 96	79 - 85
2X	64	94	96 - 105	86 - 94

The smallest wheel you should ride on a Bombadil is 38mm, and that, only for road riding and touring. Remember, it's a *mountain* bike. With the smaller tire, the standover will shrink maybe 10 to 15mm. The standovers listed are with "big fat knobby" tires in the 50-52mm range.

Geometrical note: It follows the Rivendell formula, with long chainstays, high bars, lowish bottom bracket (for a mountain bike), and a trail I think is appropriate for a mountain bike. If I were to list the top tube lengths, it would mean nothing unless you were to compare them with other bikes with the same seat tube angle, same upsloping top tube, same head tube height, and same stem. And that's not going to happen, because there is no other such bike. What matters is the fit and ride. The frame gives appropriate launch-off points for the seat post and handlebars, and there's enough adjustability in the available options to dial it in pretty much any way you like.

For heavy off-road use, we recommend only DirtDrop stems. Not to suggest the others will break, but Nitto makes the DD stems specifically for the stresses of rocky riding, and so...so do we.



It's a chainstay-bridge! It's a kickstand plate! It's a double-duty hunk of metal. A Pletscher kickstand bolts right on, adding just 7.2 ounces to a bike that doesn't count ounces.



There's a lot going on with these three pix, so please pay attn. The tapped fork crown and top eyelet on the front dropout allow creative rack mounting that wouldn't be possible without them. Tubus rear racks on the front, for example; or the R14 Top rack (and another we have in the works) on the front.



Above: Currently, the 2nd top tube's lugs are carved from existing lugs. This nonsense must stop. Too much work, too much \$\$\$! We'll get lugs made special for this.



Graphics

The lettering is mostly gold, and yet the first run of head badges was antiqued silver. If you got a Bombadil with a silver badge and you want a gold one, send back the silver and we'll swap you. The silver doesn't look bad, but the gold is a better match for the decal letter color, if that is a concern.