





Cargo Solutions for Cycles: The Consumer Test



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Cargo Solutions for Cycles: *The Consumer Test*

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www.cyclelogistics.eu



Test of cargo solutions for bicycles

Performed by

Danish Cyclists Federation

As ordered by The **European Cyclists' Federation**

On behalf of The **cycle***logistics* project





The tests in this rapport were performed by the Danish Cyclists Federation on behalf of the EU project Cyclelogistics. The tests took place in April, May and June 2012.

The object of the project cyclelogistics is to promote and support the use of bicycles for urban cargo transportation, both in private and business context.

The test covers the following product types

- Cargo bikes
- Trailers
- Shopping trailers
- Panniers
- Baskets

The items in this test are chosen to meet two requirements:

- 1. They represent a wide range of varieties and solutions for cargo transport for bikes
- 2. All manufactures are export oriented and all the items can be purchased all over Europe.

Test procedure:

Five private persons and/or small companies, who use a bike daily, tested all items for a minimum of five days. They were told to let the item be a part of their regular routine. After the test period they were told to evaluate the item on a range of different parameters. Both by rating each parameter with a number from 1 to 4, 4 being the best, and by commenting on advantages and disadvantages.

In addition to this, each item was tested and evaluated by an expert team from the Danish Cyclist Federation.

Tested items are

Cargo bikes:

- Christiania
- Nihola
- Bakfiets
- Bullitt
- Yuba Mundo
- Xtra cycle
- Tout terrain Cosmopolitan

Bags/panniers:

- Arkel Commuter
- Basil Mirte
- Carradice A4
- Ortlieb Shopper
- Racktime Buyit
- Basil Basonyl

Baskets:

- Hebie Bootbag
- Basil California
- Basil Cardiff
- Basil Folding
- Racktime Baskit





Trailers:

- Tout Terrain Mule
- Christiania Standard
- Burley Nomad
- Burley Flatbed
- Carryfreedom Y frame

Shopping trailers:

- Andersen Royal Shopper hydro plus
- Burley Travoy
- Carryfreedom City
- Winther Donkey

Evaluation

Each item is described and evaluated with the following entries:

- Dimensions
- Description of user group that the item is best suited for. Both for business and private users.
- Test panel comments
- Test panel rating of different user friendliness aspects.
- Expert overall rating

The testing is performed by experienced cyclist, but with very different age and fitness level. There for terms like "ride far" or "not very long" are used as relative terms. What is long or short will depend on rider experience, fitness level and also road condition combined with general topography.





Cargo bikes

Christiania

Expert's description:

The Christiania bike is a three-wheeled cargo bike, the model tested had 5 internal hub gears and coaster brake. The bike is available in other configurations. The sitting position is upright and relaxed. The bike has brakes on both front wheels. The brakes are well balanced so the bike doesn't turn when you brake. You steer by turning the entire load bed. This system is well functioning, but requires some getting used to. The bike comes with mudguards and a regular chain guard. All the components on the bike are satisfactory quality. Rain cover for load available.

In sharp turns it tips over a bit easier than the Nihola(the other three wheel cargo bike in the test) and has a tendency to wobble at high speed.

It is the heaviest bike in the test, but also the bike with the biggest cargo capacity. The load bed is a rectangular box and therefor very easy to load.

Webpage:

http://www.christianiabikes.com/

Specifications: Provided by producer/website

• Weight: 38 kg.

• Box/load bed: 90 cm * 63 cm * 50/36 cm

Load capacity: 100 kg.Total length: 208 cmTotal width: 87 cm

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Target group, private:

A person or a family with the need to bring a lot of items.

At the same time a person/family who prioritizes that the bike is easy to handle (park, load etc.) and accepts that the bike is heavier and slower than other cargo bikes. The bike is very suitable for transportation of children.

Target group, company:

A company with the need to transport many different types of cargo, within the limitation of the load beds dimensions. The primary need should be transportation of heavy cargo within short distances, for instance the city centre.

Because of the very basic load bed/box, the bike is suitable to rebuild to specific purposes, for instance a "coffee bike" or portable music system.

Like the Bakfiets, the Christiania bike has an "organic expression".

- Easy to control and comfortable sitting position
- Not made for speed
- The bike tips over easily when you turn, especially without cargo
- You can fit almost everything in the box/load bed
- The locking mechanism on the front break is brilliant
- Very heavy and very broad on the bike lane
- Nice retro design





| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 2,5 |
| It is easy to manoeuvre the bike on a busy bike lane | 2 |
| It is easy to park the bike | 3 |
| The bike is not too heavy without cargo | 2,5 |
| The bike is not too heavy with cargo | 3,5 |
| The bike is easy to load | 4 |
| It is easy to secure the cargo to the bike | 2,5 |
| The bike is well suspended | 3,5 |
| The bike is appealing | 3,5 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |





<u>Nihola</u>

Expert's description:

The Nihola bike is a three-wheeled cargo bike with 7 internal gears and coaster brake. The bike comes in other configurations. The sitting position is upright and feels very comfortable in relation to the bikes geometry and characteristics. The bike comes with mudguards and a regular chain guard. The bike has brakes on both front wheels. The brakes are well balanced so the bike doesn't turn when you brake.

The steering is very easy because the load bed doesn't turn with the handlebars. The bike is easy to control, even for a relatively inexperienced cyclist. Most three-wheeled cargo bikes starts to wobble at high speed. This also applies for Nihola, but is less pronounced than for other bikes. All the components on the bike are satisfactory quality.

The deep load bed is often an advantage, like on the Christiania and the Bakfiets, because there is no need to fasten the cargo. But obviously this also causes some limitations compared to an open load bed. Rain cover for load available.

Webpage:

http://www.nihola.dk/

Specifications: Provided by producer/website

Weight: 32 kg.

Box/load bed: 50 cm * 62 cm * 88 cm

Load capacity: 100 kg.Total length: 200 cmTotal width: 89 cm



Target group, private:

A person or a family with the need to bring a lot of items. At the same time a person/family who prioritizes that the bike is easy to handle (park, load etc.) and accepts that the bike is heavier and slower than other cargo bikes. The bike is very suitable for transportation of children.

Target group, company:

A company with the need to transport many different types of cargo, within the limitation of the load beds dimensions. A company that needs a bike that most cyclist can ride with very little practice. The bike expresses innovation, modernity and development to a greater extent than other three-wheeled cargo bikes.

- Sometimes it tips over curbs, but it is more stable than the Christiania
- Super control
- Takes heavy load without problems
- Slow and steady
- Takes the Christiania bike one step further
- Less volume than the Christiania bike





| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 3 |
| It is easy to manoeuvre the bike on a busy bike lane | 2,5 |
| It is easy to park the bike | 3 |
| The bike is not too heavy without cargo | 3 |
| The bike is not too heavy with cargo | 3 |
| The bike is easy to load | 3,5 |
| It is easy to secure the cargo to the bike | 3 |
| The bike is well suspended | 2,5 |
| The bike appealing | 2,5 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3,5 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |





Bakfiets

Expert's description:

The Bakfiets is a two-wheeled cargo bike with the wooden load bed between the wheels. The sitting position is upright, and even though the bike is long, it is fairly easy to ride and only takes little getting used to. Is relatively fast which gives the bike the strong combination of big load capacity and big radius of action. The bike comes with 7 Shimano gears, a very good hub dynamo lamp, mudguards, and closed chain guard. The bike is available in other configuration. All the components on the bike are satisfactory quality. Rain cover for load available.

The Bakfiets is very easy to handle because of the low entering level, and easy to load because of a very stable kick stand. The box comes in more sizes, one larger and one smaller than the one tested.

Webpage:

http://bakfiets.nl/eng/

Specifications: Provided by producer/website

Weight: 49 kg

Box/load bed: see pictureLoad capacity: 100 kgTotal length: 260 cm

Total width: 63 cm

• The box is 98*50*33cm Measure by tester



Target group, private:

A person who needs a bike with a large load capacity, but still a bike that runs relatively fast and far. The bike is also suitable for transportation of kids.

Target group, company:

A company with the need to transport many different types of cargo, within the limitation of the load beds dimensions. A company that needs a bike that most cyclist can ride with very little practice. A company that can identify itself with the bike's "organic" or "old school" expression.

- The big box/load bed is in an appropriate height, which makes it easy and comfortable to load the bike
- Even with a lot of cargo, it is still very stable
- The bike is heavy
- Nice retro design
- Old fashion
- Comfortable and surprisingly fast





| Question | Rating (1 = disagree, 4 = agree) |
|---|----------------------------------|
| The bike is easy to control | 3 |
| It is easy to manoeuvre the bike on a busy bike lane | 3 |
| It is easy to park the bike | 3 |
| The bike is not too heavy without cargo | 3,5 |
| The bike is not too heavy with cargo | 3 |
| The bike is easy to load | 4 |
| It is easy to secure the cargo to the bike | 3 |
| The bike is well sprung | 3,5 |
| The bike appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3,5 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3,5 |





Bullitt

Expert's description:

The Bullit is a lightweight cargo bike with 7 internal gears, mudguards and coaster brake. The bike comes in other configurations. The sitting position is quite aggressive and the steering requires some practice. But for the experienced cyclist the Bullit will feel fast and agile. All the components on the bike are satisfactory quality.

The load bed is flat and suitable for individual application. The bike has a very stable kick stand that keeps the bike steady while loading. The focus for the Bullit is speed and agility and a smaller capacity than other cargo bikes. The ground clearance is fairly high, which can make entering the bike a bit difficult for smaller persons. Box or big duffle bag to fit on loadbed available.

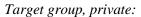
Webpage:

http://www.larryvsharry.com/

Specifications: Provided by producer/website

• Weight: 24 kg

Load bed: 47 cm * 70 cm
Load capacity:100 kg
Total length: 245 cm
Total width: 47 cm



A person with a versatile need for transportation of cargo, and who prioritizes a fast bike at the same time.

Target group, company:

Small companies that need to go fast and far. Typically a bike for a workman who brings his tool from place to place. A company where the bike is only used by one person.

- Needs a little getting used to very lively bike
- Super fast
- Easy to park
- Easy to secure load if you have straps
- The ground clearance is really good, so you don't hit the ground when you ride over bumps
- The smartest and most sporty cargo bike on the market (editors remark: there are other smaller cargo bikes)
- It was a problem that the back wheel only had a coaster brake







| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 3 |
| It is easy to manoeuvre the bike on a busy bike lane | 3,5 |
| It is easy to park the bike | 3 |
| The bike is not too heavy without cargo | 4 |
| The bike is not too heavy with cargo | 3,5 |
| The bike is easy to load | 3 |
| It is easy to secure the cargo to the bike | 3,5 |
| The bike is well suspended | 3 |
| The bike appealing | 4 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very good | 3,5 |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3,5 |







Yuba Mundo

Expert's description:

The Yuba is a two-wheeled "longbike" with 24 external gears. The sitting position is sporty or upright depending on the adjustment. The bike is very easy to control, and feels like a normal bike. The bike comes with mudguards. The bed load is actually a very large and stable luggage carrier, supplied with strong horizontal bars on the side of the carrier. The bike can be delivered with one or two big bags to hang on the side. It is possible to transport boxes on the horizontal bars, but it is difficult to secure them. All the components on the bike are satisfactory quality.

Being a cargo bike, the Yuba is very lightweight and easy to ride, is has a big radius of action. The kick stand is stable and strong, but you still have to be careful that the bike doesn't tip over when you load it. Loading it is in general a bit difficult.

Webpage:

http://yubaride.com/

Specifications: Provided by producer/website

• Weight: 24 kg

Load bed: 80 cm * 18 cmSideloader: 16,5 cm

 Load capacity: 200 kg – (editors remark: stated by producer, bike can probably take it, but it would very hard to handle, a realistic load capacity is probably 100 kg)

Total length: 210 cm measure
Total width: 65 cm measure



Target group, private:

A person who needs to bring more than a usual bike can carry, but still needs characteristics similar to a normal bike.

Target group, company:

A company who needs more loading capacity than a normal bike, and at the same time a bike that everyone can ride. A Yuba will especially be suitable to transportation of smaller packages.

- Very easy to manoeuvre in spite of the size
- The side-bag is perfect for small items, but the bike doesn't have a load bed for bigger items
- The big wheels are perfect for shock absorption on cobblestones and the like.
- The bike was perfect for everyday use could easily bring my computer and sports bag and other things.





| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 3,5 |
| It is easy to manoeuvre the bike on a busy bike lane | 3 |
| It is easy to park the bike | 3,5 |
| The bike is not too heavy without cargo | 3 |
| The bike is not too heavy with cargo | 4 |
| The bike is easy to load | 3 |
| It is easy to secure the cargo to the bike | 3 |
| The bike is well suspended | 4 |
| The bike appealing | 2,5 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3,5 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 2,5 |
| good | |

(The expert's low overall rate is not due to low quality, but is because of the limited ability as a cargo bike).







Xtra cycle

Expert's description:

The Xtra cycle is an extension kit to transform your mountain bike into a longbike. It can be used on mountain bikes with external gears. The transformation takes about an hour for an experienced cycle mechanic. The xtracycle can be removed again, this also takes about an hour.

It is difficult to load the bike, but when it is loaded it is easy and comfortable to drive with. The fabric is solid and durable. The stability in the attachment between the Xtra cycle and the mountain bike is quite stable, but starts to wobble when loaded more than 40 kg. When that limit is passed the bike becomes uncomfortably unstable.

Webpage:

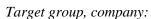
http://www.xtracycle.com/

Specifications:

Depends on wich bike the unit is fixed to.

Target group, private:

A person who already has a mountain bike, but wishes more cargo capacity. The xtra cycle kit is suitable for instance for sport equipment, such as kites for kite surfing, rollerblades etc.



A company with a limited need to transport smaller items, and that wants a cheap cargo bike. Suitable for small packages. A bike that most people can ride.

- Just a regular bike with an extension
- When the load is very heavy, the bike is difficult to control
- Perfect with two large sport bags. Larger items are too difficult to secure to the bike
- Good idea to transform your mountain bike into a cargo bike







| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 4 |
| It is easy to manoeuvre the bike on a busy bike lane | 4 |
| It is easy to park the bike | 3 |
| The bike is not too heavy without cargo | 4 |
| The bike is not too heavy with cargo | 3 |
| The bike is easy to load | 2 |
| It is easy to secure the cargo to the bike | 2 |
| The bike is well suspended | 3 |
| The bike appealing | 2,5 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 1,5 |
| good | |

(The expert's low overall rate is not due to low quality, but is because of the limited ability as a cargo bike).





Tout Terrain Metropolitan

Expert's description:

The Tout Terrain metropolitan is not a cargo bike, but a regular bike with special ability to carry heavy bags or baskets. This is due to the fact, that the luggage carrier is a part of the frame, which makes it very strong and stable, even with a load over 50 kg.

The model in this test comes with shimano alfine 11 internal gears, which is a very well functional gear with unusually low resistance. The bike has no chain, but a belt drive. This means that the chain doesn't rust and your pants won't get dirty. Besides that, the bike has two hydraulic disc brakes and hub dynamo light. A special devise, "the plug", charges your smartphone from the hub dynamo. All the components on the bike are of very good quality.

Webpage:

http://www.tout-terrain.de/fahrraeder/metropolitan/

Specifications: Provided by producer/website

Weight: 18 kg

Load bed: (rack) 35*12cm
Load capacity: 50 kg
Total length: 170 cm

• Total width: 57 cm measure



Target group, private:

A person who wishes to drive fast and far on his/hers everyday bike, and be able to transport heavy bags, baskets etc. at the same time.

Target group, company:

A company with a limited need for transport of cargo, but sometimes have to drive fast and far. Could be a self employed who sometimes needs to carry smaller items and who needs the bike for visiting clients.

- Low capacity only good with bags or baskets
- The very large wheels is good for shock absorption
- I used it as my everyday bike always at hand and ready to carry a little more weight
- Very nice design
- Brilliant idea to make the luggage carrier a part of the frame





| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| The bike is easy to control | 4 |
| It is easy to manoeuvre the bike on a busy bike lane | 4 |
| It is easy to park the bike | 4 |
| The bike is not too heavy without cargo | 4 |
| The bike is not too heavy with cargo | 4 |
| The bike is easy to load | 2 |
| It is easy to secure the cargo to the bike | 4 |
| The bike is well suspended | 4 |
| The bike appealing | 4 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very good | 3 |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 2 |

(The expert's low overall rate is not due to low quality, but is because of the limited ability as a cargo bike).







Bags/panniers

Arkel Commuter

Expert's description:

The Arkel Commuter is made of very strong nylon, which is very water resistant. The hook system is stable and keeps the bag 100 % fixed to the bike. The design is a bit boring, but practical with many rooms and a special laptop room. Room for keys, phone, briefcase, laptop and some groceries.

Webpage:

http://www.panniers.com/eu_e/commuting-bike-bag.html

Specifications: Provided by producer/website

• Weight: 1,17 kg measure

• Volume: 24 l.

• Waterproof: No, but very water resistant

• Separate room for laptop

Target group:

The bike commuter who needs a good and solid bag for every day use.

- Would have been nice with backpack-straps
- Great with the separate laptop room
- Very basic "every day bag"

| Question | Rating (1 = disagree, 4 = agree) |
|---|----------------------------------|
| It is easy to attach the bag to the bike | 4 |
| The bag is not annoying when you ride the bike | 4 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 4 |
| The bag is waterproof | 4 |
| The bag is easy and comfortable to carry | 3 |
| The bag does not tip over when you try to stand it up | 2,5 |
| The bag is easy to load | 3 |
| The bag appealing | 3,5 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very | 4 |
| good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |





Basil Mirte

Expert's descriptions:

A bag that focuses on design more than quality. The fabric is okay, but not very durable. The hooks are not the best quality either, and the bag might fall of when you drive over big bumps. It is a nice detail that the hooks can be hidden away.

Webpage:

http://www.basil.nl/gb/assortment/

Specifications:

Weight: 720 gram measure
Volume: 16 l. measure
Waterproof: no

Target group:

A cyclist who doesn't bring too many or too heavy things. Especially not a laptop. A cyclist who primarily wishes a nice bag to bring to the beach or for shopping.

- The handles makes it difficult to fasten anything on the luggage carrier
- Not handy at all
- Too small
- Okay as a shopping bag
- Design not up to date looks like something from the 50ties
- Smart design

| Question | Rating (1 = disagree, 4 = agree) |
|---|----------------------------------|
| It is easy to attach the bag to the bike | 3 |
| The bag is not annoying when you ride the bike | 2,5 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 3 |
| The bag is waterproof | 2,5 |
| The bag is easy and comfortable to carry | 1,5 |
| The bag does not tip over when you try to stand it up | 3,5 |
| The bag is easy to load | 3 |
| The bag appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very | 2 |
| good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 1 |





Carradice A4

Expert's descriptions:

A rock solid bag with a hook system that works every time. The bag is waterproof. The design is a bit boring, but very usable with the flat bottom and square shape that makes it perfect for a briefcase and A4 paper (as the name indicates). A few small pockets for keys, phone etc.

Webpage:

http://www.carradice.co.uk/products/range/a4-pannier

Specifications:

• Weight: 0,91 kg Measure

• Volume: 18 l. Provided by producer/website

Waterproof: yes Provided by producer/website



A commuter who needs a solid bag for briefcases and perhaps a laptop. The bag is also very good for grocery shopping since the square shape makes it easy to fill with milk cartons, cornflakes boxes etc.

- Good size for every day use
- Not very handy when it's off the bike
- Boring design

| Question | Rating $(1 = disagree, 4 = agree)$ |
|---|------------------------------------|
| It is easy to attach the bag to the bike | 2 |
| The bag is not annoying when you ride the bike | 3 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 4 |
| The bag is waterproof | 3,5 |
| The bag is easy and comfortable to carry | 2 |
| The bag does not tip over when you try to stand it up | 3 |
| The bag is easy to load | 3 |
| The bag appealing | 1 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |







Ortlieb Shopper

Expert's descriptions:

A 100 % waterproof bag – also at the zipper. The hooks are really good, easy to attach and detach, and keeps the bag fixed to the bike. When not in use, it takes up very little space. The design is a bit rough and will not appeal to everyone. A bag that is better for grocery shopping and smaller items, than a laptop. The bag has a small room for keys and wallet.

Webpage:

http://www.ortlieb.de/_prod.php?lang=en&produkt=bikeshopper

Specifications:

• Weight: 0,97 kg measure

• Volume: 20 l. Provided by producer/website

• Waterproof: Yes Provided by producer/website



Target group:

A cyclist who appreciates a very durable and useful bag that can take every day use and abuse. A perfect bag for grocery shopping.

- Great for everyday use (school, grocery shopping etc.)
- More rooms would have been good
- Perfect (or would have been with backpack straps)
- Nice design a little too green though

| Question | Rating (1 = disagree, 4 = agree) |
|---|----------------------------------|
| It is easy to attach the bag to the bike | 3,5 |
| The bag is not annoying when you ride the bike | 3,5 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 4 |
| The bag is waterproof | 4 |
| The bag is easy and comfortable to carry | 2,5 |
| The bag does not tip over when you try to stand it up | 2,5 |
| The bag is easy to load | 4 |
| The bag appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very | 3,5 |
| good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 4 |





Racktime Buyit

Expert's descriptions:

This bag has very good hooks that are easy to attach and detach, and that keeps the bag 100 % fixed to bike. It is a smart detail that the hooks can be hidden away. The fabric is fairly durable, but not flashy. The bag doesn't have that much capacity, but is fine if you just need to bring a few items.

Webpage:

http://www.racktime.com/en/bicycle-bags/buyit

Specifications: Provided by producer/website

Weight: 0,70 kgVolume: 14 l.

• Waterproof: No, but very water resistant



Target group:

A cyclist who doesn't need that much space. Who wants a durable bag, that doesn't look like a cycle bag.

- The "self locking" hooks are smart
- Almost waterproof. If it rains a lot, the zippers are not completely waterproof.
- The handles are a bit sharp, and it misses a shoulder strap
- Nice design looks like a normal bag and not a cycle bag

| Question | Rating (1 = disagree, 4 = agree) |
|---|----------------------------------|
| It is easy to attach the bag to the bike | 4 |
| The bag is not annoying when you ride the bike | 4 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 4 |
| The bag is waterproof | 3 |
| The bag is easy and comfortable to carry | 2 |
| The bag does not tip over when you try to stand it up | 3 |
| The bag is easy to load | 4 |
| The bag appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very | 2,5 |
| good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 2 |





Basil Basonyl

Expert's descriptions:

A classical double-bag with a lot of space. Since it is an overhanging bag, there is no need for hooks. It doesn't fall off, but is difficult to attach and detach. The bag is made of the very resistant fabric tarpaulin that usually is being used for truck tarpaulins. Can also be used as a touring bag.

Webpage:

http://www.basil.nl/gb/assortment/

Specifications: Provided by producer/website

Weight: 1,5kgVolume: 40 l.

• Waterproof: No, but very water resistant



Target group:

A cyclist with the need to carry many things. Also a cyclist that prefers to carry the groceries in shopping bags and leaves the Basil Basonyl on the bike.

- A bit difficult to lift both bags at the same time
- Seems waterproof
- It is a hassle to carry
- Room for many things in the two bags
- Looks like something from the 70ties

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach the bag to the bike | 2 |
| The bag is not annoying when you ride the bike | 4 |
| The bag stays attached to the bike over bumps, cobble stones etc. | 4 |
| The bag is waterproof | 3 |
| The bag is easy and comfortable to carry | 1 |
| The bag does not tip over when you try to stand it up | 4 |
| The bag is easy to load | 3 |
| The bag appealing | 1 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 very good | 2 |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 2 |





Baskets

Hebie Bootbag

Expert's descriptions:

The primary quality of this basket is the design. The position on top of the luggage carrier is quite a challenge if you enter your bike by swinging the leg over the back of the bike. The basket should be permanently fastened to the bike, since the "snap" attachment tends to break when used on everyday basis.

Webpage:

http://www.hebie.de/bootbag-199-BG.hebie199ah0.0.html?&L=1

Specifications:

• Dimensions: 20 cm * 34 cm * 34 cm Measure

• Capacity: 15-20 | Estimate

• Material: Leather or strong plastic



Target group:

A cyclist who wants a small basket to carry some items and somewhere to put the helmet when he/she pulls the bike. Especially a basket for a cyclist that cares about smart design.

- Looks sporty
- Too plastic-like. The attachment broke when my bike fell over
- Very easy to attach and detach

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach the basket to the bike | 4 |
| The basket it not in your way when you ride the bike | 3 |
| The basket stays attached to the bike over bumps etc. | 3 |
| The basket is easy and comfortable to carry | 2,5 |
| The basket does not tip over when you try to stand it up | 3 |
| The basket is easy to load | 3 |
| The basket appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 2 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | $\overline{2}$ |
| good | |





Basil California

Expert's descriptions:

The Basil California has a big flat load bed that invites you to load it with big and heavy bags. This is a bad idea though, since the spring attachment system is so poor that the basket will fall off if the load heavier than 2 to 3 kilos.

Webpage:

http://www.basil.nl/gb/assortment/

Specifications:

• Dimensions: 51 cm * 27 cm * 18 cm measure

Capacity: 18 L estimateMaterial: steel mesh



Target group:

A person who wants easy access to what's in the basket, and can accept not carrying heavy or vulnerable cargo.

- Seems a little unstable over cobblestones etc.
- Good to carry with the two handles
- The sides are too low I was afraid my things would fall off
- Too wide to carry
- Good for a sports bag, but bad with light items because of the low sides.

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach the basket to the bike | 2,5 |
| The basket it not in your way when you ride the bike | 2,5 |
| The basket stays attached to the bike over bumps etc. | 3 |
| The basket is easy and comfortable to carry | 2,5 |
| The basket does not tip over when you try to stand it up | 3 |
| The basket is easy to load | 3,5 |
| The basket appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 1,5 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 1 |
| good | |





Basil Cardiff

Expert's descriptions:

A solid basket that works even with a heavy load. The long hooks make sure that the basket does not fall off, even over big bumps in the road. It is easy to attach and detach. Perfect to bring in the supermarket and put the groceries directly in to it, and when you come home, it's easy to bring inside.

Webpage:

http://www.basil.nl/gb/assortment/

Specifications: Provided by producer/website

• Dimensions: 33 cm * 24 cm * 33 cm

• Capacity: 25I

• Material: steel mesh

Target group:

A cyclist who needs a regular basket that works and is durable.

- Classic design
- Hits the legs sometime when you ride the bike
- Good to bring in the supermarket
- Stays fixed to the bike (rattles though)
- A very good basket
- A locking system would have been nice, so I wouldn't have to bring it every time I leave the bike.

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach the basket to the bike | 4 |
| The basket it not in your way when you ride the bike | 2,5 |
| The basket stays attached to the bike over bumps etc. | 3,5 |
| The basket is easy and comfortable to carry | 3,5 |
| The basket does not tip over when you try to stand it up | 4 |
| The basket is easy to load | 4 |
| The basket appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 3 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |







Basil Catania folding basket

Expert's descriptions:

Small but solid basket. The basket is permanently mounted to the bike and can be folded when it isn't used. The folding mechanism is fairly easy to use. Due to the folding mechanism, the bottom is not as solid as the rest of the basket, so don't use this basket for items heavier than 5-7 kilos. The basket may rust a little since the paint wears off when you fold it.

Webpage:

http://www.basil.nl/gb/assortment/ -

Specifications: Provided by producer/website

• Dimensions: 33 cm * 23 cm * 20 cm

• Capacity: 15l

• Material: steel mesh



A cyclist who likes to bring the basket every day without having to remember it. A cyclist who appreciates the very limited space the basket takes up when not in use.

- Nice that you never hit it with your legs
- Nice that the basket is always with you you don't have to remember it when you leave home
- Ugly design

| Question | Rating $(1 = disagree, 4 = agree)$ |
|--|------------------------------------|
| It is easy to attach the basket to the bike | - |
| The basket it not in your way when you ride the bike | 4 |
| The basket stays attached to the bike over bumps etc. | 4 |
| The basket is easy and comfortable to carry | - |
| The basket does not tip over when you try to stand it up | - |
| The basket is easy to load | 3 |
| The basket appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 2,5 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |





Racktime Baskit

Expert's descriptions:

Very stable and useful basket. Very easy to attach and detach, but it requires a special luggage carrier. This makes the Racktime Baskit an expensive solution if you don't already have a Racktime luggage carrier.

Webpage:

http://www.racktime.com/en/bicycle-baskets/baskit-large

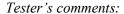
Specifications:

• Dimensions: 42,5 cm * 31,5 cm * 24,5 cm measure

Capacity: 23 l estimateMaterial: steel mesh

Target group:

A cyclist who uses the bike on an every day basis, and who is willing to pay for a really good and useful basket.



- Very easy to attach, but it requires a special luggage carrier
- Completely stable, doesn't rattle
- The padded handles are very nice

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach the basket to the bike | 4 |
| The basket it not in your way when you ride the bike | 3 |
| The basket stays attached to the bike over bumps etc. | 4 |
| The basket is easy and comfortable to carry | 4 |
| The basket does not tip over when you try to stand it up | 4 |
| The basket is easy to load | 4 |
| The basket appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 | 4 |
| good, 4 very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very | 3 |
| good | |





Trailers

Tout Terrain Mule

Expert's descriptions:

This single-wheeled trailer is a very well thought out trailer. The driveability is amazing: light, easy to handle, precise and spring mounted. The load bed is not that big, but the trailers other advantages compensate. It is a bit long and unhandy when it's off the bike.

Webpage:

http://www.en.tout-terrain.de/trailers/mule

Specifications: Provided by producer/website

• Weight: 6,7 kg. Optional stand: 0,76 kg

• Dimensions: 73 cm * 40 cm * 17 cm,

• Capacity: approx. 50 l. 40kg



Target group:

A cyclist who needs to bring more than you can bring on the bike, but not really heavy and big items. A cyclist that goes fast and far and who appreciates the great driveability.

- The shock absorber is brilliant. I used the trailer to transport 50 eggs, and not one was broken when I got home
- You can hardly feel the trailer when you ride the bike
- Easy to attach and detach the trailer to the hitch
- The trailer is a bit too long to handle when it's off the bike
- The load bed is a bit too small
- The rain cover works fine to keep the cargo on the trailer.
- The orange inverse bag and yellow rain cover makes you very visible in the traffic
- The kick stand makes it easy to load
- My favourite trailer

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 4 |
| It is easy to control the bike when the trailer is attached | 4 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 4 |
| It is easy to secure the cargo to the trailer | 3,5 |
| The trailer is easy to store away at home | 3 |
| The trailer appealing | 4 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 4 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |





Christiania standard

Expert's descriptions:

The Christiania trailer is rock solid, easy to load and with great capacity. Easy to attach and detach with a very simple coupler. It is heavy and can tip over if you turn too fast.

Webpage:

http://www.christianiabikes.com

Specifications: Provided by producer/website

• Weight: 17,5 kg

• Dimensions: 88 cm * 48 cm * 35 cm

• Capacity: 100 kg

Target group:

I this is a good trailer if you need to transport many or heavy items. The rider has to be aware that the trailer can tip over i you take turns fast.

- The trailer is heavy, but this disadvantage is outweighed by the great capacity
- The trailer can tip over if you don't drive carefully
- Seems rock solid
- Boring design
- Fitting the trailer to the bike/hitch can be annoying, since the lock pin doesn't always engage easy
- You get what you see It's a "truck". Heavy and clumsy, but with great capacity.

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3 |
| It is easy to control the bike when the trailer is attached | 3 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 4 |
| It is easy to secure the cargo to the trailer | 3 |
| The trailer is easy to store away at home | 2 |
| The trailer appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 2,5 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |







Burley Nomad

Expert's descriptions:

Really good trailer with a smart design. It is lightweight and the aluminium frame is fairly stable. If you load it with more than approximately 30 kilos, it will affect the stability.

Webpage:

http://www.burley.com/home/bur/page_454/nomad.html

Specifications: Provided by producer/website

• Weight: 6,7 kg

• Dimensions: open: 82,3 cm * 67,9 cm * 57,9 cm

folded: 82,3 cm * 54,6 cm * 16,5 cm

Capacity: 45,5 kg



Target group

The cyclist who needs a really good trailer for touring. The trailer is fine for shopping as well, as long as it stays on the bike, since it is not comfortable to walk with.

- It is easy to attach the trailer til the bike/hitch, but you have to make sure the bike stands upright, otherwise you can't get to splint through (same as Burley Flatbed)
- You hardly feel the trailer when you ride the bike
- It is easy to detach the wheel and carriage beam if you want to store the trailer away
- Be careful not to put too small items in the box/load bed they will fall through the little holes
- Smart and light

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3 |
| It is easy to control the bike when the trailer is attached | 3 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 4 |
| It is easy to secure the cargo to the trailer | - |
| The trailer is easy to store away at home | 3 |
| The trailer appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 3 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |





Burley Flatbed

Expert's descriptions:

A very comprehensive trailer to be used in many contexts. The plastic load bed is very strong and durable. The frame is quite stable as long as it is not loaded too heavy. If you load beyond 30 kilos it, the wheels will tilt inwards and the trailer will feel heavy. This can be a problem, since the very spacious load bed invites you to load it with big and heavy items.

It takes some imagination to secure the load to the load bed.

Webpage:

http://www.burley.com/home/bur/page_453/flatbed.html

Specifications: Provided by producer/website

• Weight: 6,5 kg

• Dimensions: open: 93,0 cm * 78,5 cm * 40,9 cm

folded: 94,0 cm * 66,7 cm * 10,9 cm

• Capacity: 45,5 kg



Target group

Cyclists that need to transport many different types of cargo, often at longer distances.

- It is easy to attach the trailer to the bike/hitch, but you have to make sure the bike stands upright, other wise you can't get to lock pin in place(same as Burley Nomad)
- It hardly affects the bike
- It is a little wide on a bike lane
- It never tip over
- The 4 straps to secure the load works fine, but sometimes you need more and longer straps
- Easy to store away because it is flat and you can detach the wheels
- Very good for boxes

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3 |
| It is easy to control the bike when the trailer is attached | 3 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 2 |
| It is easy to secure the cargo to the trailer | 3 |
| The trailer is easy to store away at home | 3 |
| The trailer appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 2 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 2 |





Carryfreedom Y frame

Expert's descriptions:

A very useful and allround trailer. Very easy to use, very stable and with a surprisingly big load capacity. The load bed is covered with a non-skid material so the cargo doesn't slide. It takes some imagination to secure the load to the load bed.

Webpage:

http://www.carryfreedom.com/Y-Frame.html

Specifications: Provided by producer/website

• Weight: 7 kg

• Dimensions: 70 cm * 50 cm

• Capacity: 90 kg

Target group

A cyclist or a company who needs to transport big, heavy bags or boxes. Can easily be adjusted to a special build box to your company, for instance an isolated box for pizza delivery.

- Easy and solid coupler (the bike needs to be completely upright though)
- Very stable. Even with a very heavy load
- Very flexible load bed
- You have to be careful to load and secure the cargo so it doesn't touch the wheels.
- Easy to detach the wheels and store it away
- Very nice and almost graphical "less is more" design

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3 |
| It is easy to control the bike when the trailer is attached | 3 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 2 |
| It is easy to secure the cargo to the trailer | 3 |
| The trailer is easy to store away at home | 3 |
| The trailer appealing | 4 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 4 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 4 |







Shoppingtrailers/trolleys

Andersen Royal Shopper hydro plus

Expert's descriptions:

This trailer has god materials – very durable and tough. The solid wheels do not puncture, but has pure driveability compared to pneumatic wheels. The bag is more or less waterproof, but not at the closing. The trailer is very much like a normal shopping trailer for walking. The very pure drivability is almost dangerous when the trailer is empty. The coupler is big and ungainly.

Webpage:

http://www.andersen-shopper.de/en/products/shopper-collection/uebersicht-shopper-serien.html

Specifications:

• Weight: 4,8 kg Provided by producer/website

• Capacity: 50 kg Provided by producer/website

Bag dimensions: 35 cm * 67 cm * 24 cm measure

• Bag volume: 56 l estimate

Target group

A person who does not cycle very far and who primarily needs a shopping trailer. The trailers definitely performs best when it is detach from the bike.

- It is easy to attach and detach the trailer to the coupler, but the coupler is NOT easy to attach to the bike.
- Very big and ugly coupler
- I very much like that the bag is also a backpack
- Very unstable, especially when empty
- Very usable to bring into the supermarket for grocery shopping
- The trailer "dances" behind the bike feels very uncomfortable

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 4 |
| It is easy to control the bike when the trailer is attached | 1 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 3 |
| It is easy to secure the cargo | 4 |
| It is easy to fold the trailer and store it away at home | 4 |
| The trailer appealing | 2 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 2 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 1 |





Burley Travoy

Expert's descriptions:

This trailer has god materials – very durable and tough. The finish is very good as well. The folding when the trailer is off the bike is easy and effective. Good driveability.

Webpage:

http://www.burley.com/home/bur/page_416/travoy.html

Specifications: Provided by producer/website

• Weight: 4,4 kg

• Dimensions: 53,3 cm * 46,7 cm * 20,3 cm

Capacity: 27,3 kg

Target group:

A dedicated cyclist who needs to transport many different items and sometimes has to drive far.

- Very easy to attach the trailer to the bike/hith, even when the trailer is loaded
- No wobbling, even over 30 km/h
- It is difficult to attach and detach the bag to and from the trailer when it is full
- I could have used some backpack-straps on the bag
- Very easy to fold and store away
- Too big to bring into the supermarket
- Brilliant coupler very easy to use, and you can't see it when the trailer is detached
- The bag is too soft for groceries, but otherwise practical

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 4 |
| It is easy to control the bike when the trailer is attached | 3,5 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 3 |
| It is easy to secure the cargo | 2,5 |
| It is easy to fold the trailer and store it away at home | 3 |
| The trailer appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 2,5 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |







Carryfreedom City

Expert's descriptions:

This trailer is well made and good materials are used. The trailer is a mix between a shopping trailer and a regular trailer. The driveability is very good because of the low centre of gravity. The horizontal load bed gives the trailer a larger flexibility than other shopping trailers.

Webpage:

http://www.carryfreedom.com/city.html

Specifications: Provided by producer/website

Weight: 5 kgCapacity: 45 kg 70l



A dedicated cyclist with a varying need to bring smaller items and who sometimes has to drive far.

- Very easy to attach and detach the trailer to the bike/hitch
- The hitch is easy to move from one bike to another
- The trailer is very stable and comfortable behind the bike
- The bag is too small
- The flat bed is smart for larger items that doesn't fit into the bag
- The trailer/bag is very black. I was afraid the other cyclists wouldn't see it because it is so close to the ground

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3 |
| It is easy to control the bike when the trailer is attached | 4 |
| The trailer stays attached to the bike over bumps etc. | 4 |
| It is easy to load the trailer | 2,5 |
| It is easy to secure the cargo | 2 |
| It is easy to fold the trailer and store it away at home | 4 |
| The trailer appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 3 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 3 |





Winther Donkey

Expert's descriptions:

The trailer itself is very solid and sturdy. The driveability is ok, but not impressive. Attaching the trailer to the hitch is easy, but it is noisy when you ride the bike. The hitch itself is ugly and ungainly.

Webpage:

http://www.winther-bikes.com/pages/donkey.php

Specifications: Provided by producer/website

• Weight: 10,5 kg

• Dimensions: 60 cm * 38,5 cm * 37,5 cm

• Capacity: 40 kg

Target group

A person who needs a solid and spacious shopping trailer that works away from the bike. The disadvantage is poor driveability.

- The trailer is very unstable, especially when empty. The trailer starts to swing from side to side
- Big and sturdy box/bed load
- Very good to bring into the supermarket
- The rain cover works!
- The coupler is very big and ugly and way too difficult to attach to the bike

| Question | Rating (1 = disagree, 4 = agree) |
|--|----------------------------------|
| It is easy to attach and detach the trailer to and from the bike | 3,5 |
| It is easy to control the bike when the trailer is attached | 1 |
| The trailer stays attached to the bike over bumps etc. | 2,5 |
| It is easy to load the trailer | 3,5 |
| It is easy to secure the cargo | 3,5 |
| It is easy to fold the trailer and store it away at home | 2 |
| The trailer appealing | 3 |
| How do you rate the item over all? 1 poor, 2 medium, 3 good, 4 | 1,5 |
| very good | |
| Expert overall rate - 1 poor, 2 medium, 3 good, 4 very good | 2 |

