



# “DOWN & FEATHER TRIVIA”

## 1. WHAT IS DOWN?

A single unit of down is called a cluster. It is a 3-dimensional spherical plume comprised of a quill point (with no quill shaft) and many thousand filaments which radiate from it. A down cluster has the overall appearance of a ripe dandelion pod.

## 2. WHAT IS THE SOURCE?

Down comes from the underbody of waterfowl such as geese and ducks. Landfowl such as chickens and turkeys do not produce down. Down clusters grow under the outer protective layer of feathers, and are most numerous on the breast area.

## 3. WHAT IS A FEATHER?

Feather, the principal covering of birds, is of flat, two dimensional construction. It has a hard, tubular quill shaft from one end to the other. Feathers have a series of softer fibers on each side of the quill shaft.

## 4. WHAT'S THE DIFFERENCE BETWEEN DOWN AND FEATHER

First of all, they are two completely different structures. A down cluster has an identity all its own. It is not a young small feather, and will never develop into a feather.

A down cluster has a quill point but no quill shaft. Although a down is lighter than a feather, its three-dimensional structure allows it to trap more air and therefore has more “loft” or insulation.

## 5. HOW CAN DOWN BE SO LIGHT, YET INSULATE SO WELL?

Because of its three dimensional structure and ability to “loft”, each down cluster traps more air for its weight than any synthetic. Every ounce of good down has about 2 million fluffy filaments that interlock and overlap to form a protective layer of non-conducting still air that keep warmth in and cold out. Because of its resilience, you can scrunch it up or flatten it out. All it takes is a good shake for it to fluff up and bounce back to the form that keeps you cozy and warm.

## 6. HOW IS THE BEST DOWN CHOSEN?

Down is washed, chemically cleaned and separated into different grades by blowing. The air currents in a sorting machine send the best down drifting up to the highest bin, to be graded as the finest quality. Down of lesser quality and feathers then fall into the lower bins.

## 7. WHICH BIRDS PROVIDE THE BEST DOWN?

Generally speaking, the best down is formed by the biggest clusters. And the biggest clusters come from the larger, more mature birds. Geese are normal larger birds and usually provide the best quality down. Large, mature ducks provide good quality down too, but under a microscope, goose down plumes tend to be stronger, last longer, and have more filling.

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### 8. WHAT IS EIDERDOWN?

The world's most expensive down is a duck. The eider sea duck from Iceland has the most desired down of all. Because the wild Eider Duck is a protected bird, farms in Iceland remove small amounts of down from the nests while the bird is molting.

### 9. DOES CLIMATE AFFECT THE QUALITY OF THE DOWN?

The age of the bird is really the determining factor. Climate does, however, affect quantity. A bird harvested in cold weather will yield a greater amount of down. But quality depends simply on the maturity of the bird.

### 10. DOES COLOR HAVE ANY RELATION TO QUALITY?

None at all. As stated previously, quality is determined mainly by the age of the bird. White down is prized because it can be put into light colored coverings without showing through. However, duckling down is pure white, and beautiful, but has very low filling power. Conversely, the down of the mature Canada goose is dark grey, and the prized down of the eider sea duck is almost black.

### 11. WHY IS MOST DOWN IMPORTED?

The production of down depends solely on the dietary habits of an area. For instance, North Americans are relatively small consumers of duck and geese, so they harvest a proportionately small amount of down. In many Asian countries, ducks and geese provide a good portion of the meat supply. At the moment, China produces over 70% of the world's down supply. Down is a by-product of the meat industry, and its production depends not on climate or locality, but on the eating habits of local people.

### 12. IF DOWN IS SO SUPERIOR, WHY ARE SO MANY SYNTHETICS BEING MANUFACTURED?

The highest compliment is to be copied, and companies have tried for years to create “**synthetic down**”. So far, no one has created an acceptable synthetic down. In fact, the term “synthetic down” is illegal in Europe and is unacceptable by the USA state bedding regulators. The manufacturers of synthetic fibers have invested large sums in product development and in later marketing of the products. Also, the supply of down and feathers is not large enough for the demand in insulated bedding and apparel.

### 13. WHY IS DOWN SUPERIOR TO SYNTHETICS AS AN INSULATOR?

Down gives approximately 3 times the warmth per ounce compared to synthetics. Also, its ability to loft, or fill the space it occupies is greater, longer lasting, and more uniform. Synthetics mat and lump together, in time, leaving empty, cold spots, while down continually re-lofts and molds itself to the body.

### 14. WHY IS DOWN MORE COMFORTABLE THAN SYNTHETICS?

Down has the ability to mold itself to the body while synthetics remain rigid. It also has the marvelous ability to breathe and wick away perspiration, so the user doesn't experience the clamminess which often occurs with synthetics.

### 15. HOW LONG CAN I EXPECT MY DOWN PRODUCT TO LAST?

With the proper care and cleaning, your down product will remain functional longer than you will. You'll definitely get your money's worth.

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### 16. WHAT HAPPENS TO DOWN IF IT GETS WET?

Try and submerge your down product for a wash, and you'll see it's not easy to get down completely wet. So even if the user gets caught in the rain, the natural oils in the plumes tend to repel water, and the product will usually look a lot wetter than it really is. Getting wet does not hurt down, as long as it's properly dried within a reasonable length of time.

### 17. HOW DO I CLEAN MY DOWN PRODUCT?

Down can either be washed or dry cleaned. The important thing is that it be very clean when the process is over. If the filaments are contaminated with suspended dirt, or dirty dry cleaning solvent, they will not re-loft properly and the down will lose much of its insulating ability.

Some say down should be washed, in mild soap only. There are special soaps on the market for this purpose. If machine washed, care must be taken to dry the down product carefully.

### 18. HOW DO I STORE MY DOWN?

For practical purposes and mobility, you can compress your down product tightly and stuff it into a pack sack. But, down products should not be compressed for extreme long periods of time. They should be stored in a dry, ventilated area.

Sleeping bags or comforters should be stored in a loose, breathable bag, and a garment should be properly hung. After storing in a tight stuff bag, the down product should be shaken out well and allowed a short period of time to re-loft before being put to use. Many consumers place down products in a tumble dryer for 30-40 minutes on a regular basis. This helps restore loft if down has not been properly stored or if a down product has a mild smell.

### 19. WHY IS DOWN SO EXPENSIVE?

Down is freely traded on the open market and its prices are governed by supply and demand. Since 1975, prices have risen four fold, because more and more people are coming to appreciate the tremendous advantages of this unique natural product.

Eiderdown is the most expensive product. Eiderdown is collected in very small amounts from nests of birds while they are molting. Eiderdown sells for over \$1,000 per pound. An Eiderdown comforter in Japan can sell for over \$25,000.

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