

December 2008

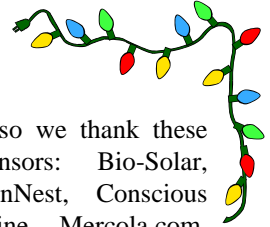
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## Happy Holidays

As we enter into this holiday season we wanted to take the opportunity to wish you and your family a safe and healthy holiday. We wish you the best as you make your New Year's resolutions and continue to make building decisions for your family based on biological and ecological reasons.

And also we thank these corporate sponsors: Bio-Solar, EcoNest, GreenNest, Conscious Design Magazine, Mercola.com, Natural Home Magazine, Natural Life and Wings of Eagles Healthy Living.



## Rescuing the "Green" Movement

IBE making a difference

The Green movement has been infiltrated by many who see it as an avenue to make money. Though we applaud the efforts of those who are trying to improve the ecological environment, we at IBE go beyond green. IBE is the real thing with building principles based first on what is good for the occupants – biological – it is also good for the environment – ecological.

### In 2008 – IBE progress

With your help, in 2008 we were able to provide information to over 2,000 people so they could make informed choices. You made it possible for folks to improve their indoor environments where they live, work and play.

We did this through seminars, courses, conferences, YouTube, and publications.

Special thanks to: Paula Baker-Laporte, Lisa Beres, Ron Beres, Carol Cannon, Stephen Collette, Daymon Coyne, Peg Donahue, Marston Gregory, Larry Gust, Jeannetta Hitt, Jeanne McLaughlin, Bill Meadows, Rob Metzinger, Jenny Michalak, Dan Stih, Valerie Tourangeau and Mike Weston.



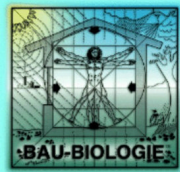
You can help us get the information to these new parents, so that they can make this a healthy nursery for their child. *Picture provided by GreenNest (www.greennest.com)*

### In 2009 – IBE explodes

With your continued help, the year 2009 is emerging as an exciting year for Biological and Ecological building.

As the "green" movement continues to grow, the "Even Better Than Green" concepts that evaluate whether buildings are biological supportive are ballooning. We hope to reach out to over 200,000 people. With your donations of time and money we intend to create internet blogs, resource pages, low-cost courses and seminars.

Our vision is to make it easy for everyone to get the right answers to their questions. Like you, we want every man, woman and child to live, work and play in the healthiest environment possible.



With your help we can change the environment. Join for 2009.

Become an IBE Member

- Student member \$25
- Basic member \$45
- Contributing member \$65\*
- BBEC Member \$100\*
- Lifetime Member \$1000\*

Sign up today to start making a difference

**Become a Member Page**

<http://www.buildingbiology.net/becomemember1.html>

\* Membership dues above \$65 include a subscription to Natural Life Magazine



## Calendar of Events

January 31, 2009

Recertification Deadline for BBEC  
(details on the website)

April 16-19, 2009

IBE 313 – Natural Healthy  
Building, Summertown, TN for  
practicing BBEC's and Natural  
Builders (space is limited,  
register now)

May 21 – 25, 2009

IBE 211 – Indoor Air Quality  
Seminar, Clearwater, FL

Aug 20 – 24, 2009

IBE 212 – Electromagnetic  
Seminar, Clearwater, FL

December 3-7, 2009

IBE 213 – Natural Healthy  
Building, Clearwater, FL

*Stay turned for other events including  
programs in your area by approved  
providers.*

Each newsletter IBE experts will  
address a question submitted by  
our readers.

Submit your question to  
[Outreach@buildingbiology.net](mailto:Outreach@buildingbiology.net)

Each month IBE will provide  
excerpts from their well-  
researched course material to  
empower you to take control of  
your indoor environment and  
building.



## Christmas Trees (Q&A)

Are Christmas trees healthy?

### Artificial Trees

The most toxic holiday trees are the artificial plastic trees, which are made from polyvinyl chloride (PVC). Though it seems they would last a lifetime, in fact the average life span of an artificial tree is only about six years, then it will remain in the landfill where it was disposed of for centuries. Also, artificial trees can catch fire and, when they do, they give off dangerous toxic fumes.



*Burning PVC plastic, which contains 57% chlorine when pure, forms dioxins, a highly toxic group of chemicals that build up in the food chain.*

[http://www.besafenet.com/pvc/documents/bad\\_news\\_exec\\_sum.htm](http://www.besafenet.com/pvc/documents/bad_news_exec_sum.htm)

### Warnings about Plastic

A plastic used in many products in construction, actually about 58% of all PVCs are used in construction. It is an environmental threat of immense proportion as well as a human biological threat. PVC is a threat in manufacturing (worker exposure to vinyl chloride gas) and disposal (Dioxin when burned). When PVC burns, it produces hydrogen chloride (HCl), dioxin and a host of other organochlorine products, as well as emitting heavy metals.

### Natural Trees

A natural living or cut evergreen tree is the best choice for a holiday tree. Their fresh fragrance is one of the traditional joys of the holiday season. But don't get a pine tree, as they contain resins and other aromatic chemicals that are natural insecticides and bactericides that can be harmful even to those in good health. In this case, "natural" does not mean safe. Fir and spruce trees do not contain the same chemicals as pine and are safe for health.

*Much of this answer contributed by Debra Lynn Dadd (see page 3)*



## Electric Cords at the Holidays?

How to use them safely?

With all the hanging of holiday lights, most of us have more than average contact with electrical cords during the holidays. There are two major aspects to electrical cords.

### Increase in electromagnetic exposure

The first concern is your increase to electromagnetic exposure. From a Bau-Biological perspective any of your high occupancy areas, especially sleeping areas, should not have elevated levels. Your exposure might occur when cords are routed in, around, above, or below these areas. This can also occur if the additional electrical cords cause a current unbalance.

- IBE recommends that all electrical devices and cords within 6ft of the sleeping area be turned off at night.
- If the holiday lights are going to be left on at night – you need to check for elevated magnetic fields using a gaussmeter. *Be safe turn them off at night.*

### Lead in the cord insulation

The second is that lead is used in the production of many electrical cords and it can get into your body via the handling of these cords. The state of California requires a warning on electrical cords that lead is known to cause birth defects or other reproductive harm. Even if you aren't having children, lead can cause many other health effects. There is no safe level for lead exposure.

Debra Lynn Dadd suggests two solutions to avoid exposure to the lead. One is to wrap cords with some other material, but not electrical tape because it is made from PVC too. Wrap the cord with strips of cotton cloth. The other is wearing gloves when handling the cords. Latex or simple cotton gloves would do.

## Are your Candles Healthy?

Eliminate toxic candles from your home - Debra Lynn Dadd

The holidays are a special time of year, during which we bring decorations into our homes that are not part of our normal indoor environment. Candles, though beautiful and sometimes soothing, are used more often during the holiday seasons. Here are some precautions regarding the "biological" aspect of candles.

Candle manufacturers are not required to list or disclose hazardous, toxic or carcinogenic compounds used as ingredients in their products or even place warning labels on their products regarding emissions. But there are hazards associated with burning three different kinds of candles.



WASHINGTON, D.C. A significant number of dangerous candles are on the market that have wicks containing lead...

[www.citizen.org/pressroom/release.cfm?ID=434](http://www.citizen.org/pressroom/release.cfm?ID=434)

### Paraffin and Lead

Most candles, unless otherwise labeled, are made from paraffin, a by-product of the gasoline industry. They produce the same combustion by-products as any other burning petrochemical (including carbon monoxide, formaldehyde, hydrogen cyanide and others), though in a lesser amount. Fumes from the paraffin wax itself have been found to cause kidney and bladder tumors in laboratory animals. Many paraffin candles still have lead core wicks. According to preliminary tests, particles of lead do volatilize during normal candle burning. Preliminary wipe test results show 40mg of lead per square foot in a home that burned a number of lead core wick candles, an astounding



amount for a substance for which there is no safe level. 100% of lead that is inhaled is absorbed into the bloodstream.

### Scented candles

*Scented candles* are also a problem. With the rise in popularity of aromatherapy, candlemakers are using increasing amounts of (often artificial) fragrance oils into their wax mixtures—some of which are not even suitable for combustion. Toxic chemicals, lead, carbon monoxide, soot, and particulate matter have been found in the combustion by-products of some scented candles.

### Gel Candles

*Gel candles* are made from specially processed petrochemical mineral oils gelled with plastic polymers, poured into glass containers. You can recognize gel candles by the clearness of the gel (which is often colored), the rubbery texture, the glass container, and they often have "embeds" in them. Most gel candles are also scented with artificial fragrances, some highly so. Because gel candles are made from the same petrochemicals and fragrances used to make paraffin candles, the hazards of burning them are similar. However, the greatest danger is that gel candles that are improperly made or have glass containers that are too thin tend to explode, with tragic consequences. Here are a couple of real life stories about the dangers of gel candles.

### Beeswax Candles

The healthy choice is to burn *beeswax candles* with cotton wicks. Their naturally sweet honey fragrance is delicious. And for the holidays, try bayberry candles. A New England tradition, they are made from bayberries, boiled in water to release their wax. Legend is, the burning of bayberry candles during the holiday season brings wealth and good luck to the household. Soy candles burn extremely clean and do not give off the oily soot that can leave a residue on walls and furniture, and aggravate asthma and other breathing problems. If you want to burn scented candles, make sure they are authentic aromatherapy candles that are scented with real essential oils. All of these types

of healthy candles are available on the internet if you don't find them in your local stores.



Be safe and have a happy holiday!

*Debra Lynn Dadd has been a leading authority on eliminating toxic chemicals in the home since self-publishing the first book on the subject in 1982. Debra is the author of Home Safe Home: Creating a Healthy Home Environment by Reducing Exposure to Toxic Household Products (Tarcher/Penguin 2004) and Really Green (Oak Grove Omnimedia 2008). She also publishes the online directory "Debra's List," which contains nearly 1000 links to nontoxic, natural and earthwise products, and the popular "Green Living Q&A" blog. Debra is a consultant to individuals and businesses, and lectures frequently. She lives with her husband in Clearwater, Florida.*

Please submit articles to  
[outreach@buildingbiology.net](mailto:outreach@buildingbiology.net)  
for future issues.

