

Burn it Smart!

In Eastern Ontario February 10 to 29, 2004



Above and below: Two views of the big crowd at the workshop in Perth.





Renewable Energy in Kingston's Brad Leonard delivers one of his animated burn display presentations in Belleville.



The Hawkesbury workshop was hosted by the town fire department in their immaculate new facility.



The burn display in perfect form in Pembroke, just as the workshop was to begin.



The Wood Heat Organization Inc. 526 Highland Line McDonalds Corners, ON K0G 1M0

The Eastern Ontario Burn it Smart Workshop Series

February 10 - 29, 2004

Organized and presented by the Wood Heat Organization Inc.

In memory of Jim Collins, who inspired us all.

Final Report May, 2004



The Wood Heat Organization Inc. 526 Highland Line McDonalds Corners, ON K0G 1M0



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in Eastern Ontario February 10 -29, 2004

Executive Summary

The Burn it Smart (BiS) campaign promotes safer, more efficient and healthier use of wood as a residential fuel for heating and enjoyment. The overall objective of the campaign is to reduce wood smoke impacts in Canada. Eleven evening workshops, complete with a burn trailer demonstration, were delivered in Eastern Ontario communities. The burn trailer was also displayed and small workshops delivered during the three-day Ottawa Sportsman's, Boat and Cottage show. The project was organized and delivered by the Wood Heat Organization Inc. (WHOi), a nationally incorporated non-profit agency headquartered in the region.

By almost any measure, the Eastern Ontario BiS project produced extraordinary results. A total of 1589 people attended the evening workshops, an average attendance of 144, which exceeded by a considerable margin all previous attendance figures for BiS workshop projects. In the small town of Perth (pop. 6000) an astounding 310 people attended, overwhelming the available space at the fire hall.

Aside from good attendance, there were other, less dramatic, but more lasting results. These included lessons learned about:

- the relationship between resources expended and results achieved;
- organizational and presentation requirements with large groups;
- how carefully honed messages and presentation style affect impact and satisfaction levels

To supplement the standard contribution by Environment Canada, Ontario Region of \$20,000 for 10 workshops, which, while generous, was not judged sufficient by WHOi to meet its ambitious objectives, additional sponsorship support was sought. This effort was immediately successful and fundraising was terminated shortly after it was started.

The additional sponsorships resulted in a total operating budget, including the \$8,700 in-kind contribution by WHOi, of more than \$40,000. This permitted a far higher level of staff effort and more purchased goods and services to make the project successful than would otherwise have been possible. It permitted Cal Wallis to spend literally days on the phone identifying, briefing and supporting local partners, and to follow up with regular email updates as the local events approached. It permitted John Gulland the time to develop specialized ads, posters, media releases and articles to support an aggressive promotional campaign. It financed the labour, travel and accommodation expenses to enable both John and Cal to be present for all but two of the workshops, and this paid dividends in terms of smooth, professional delivery and significant improvements to the presentation following each event. Finally, the additional resources financed the preparation of a comprehensive project report that can inform future BiS workshop projects.

In anticipation of large audiences, a pubic address system, including two cordless microphones, was rented for the series. This relatively modest investment increased audience satisfaction in the

large venues that were selected. It was obvious from the outset that a group discussion, question-and-answer form of content presentation would not be possible, as it would have been in more intimate settings. Forced to use a lecture format in order to cover the content in the time available, it was also decided that, to maintain interest and have impact, the presentation would need to take on some elements of performance. This also proved to be a successful strategy. The active participation of local partners was essential. It was found that an effective event at a large venue required at least six additional people to work the burn display, coordinate refreshments, to organize and maintain the publications table, and to perform general hosting duties. Fortunately, willing hands were always available.

In terms of lessons learned from the project, perhaps the most significant were the insights gained into the way householders view their wood burning activities and what messages resonate with them in support of improved wood burning practice. It was found that general advice, such as "don't let your fires smoulder", is inadequate and does not satisfy the public's desire for assistance. If the objective of BiS is to promote behavioural changes that will result in reduced wood smoke emissions, the public requires highly specific insights and tools that they can put to use immediately and practice thereafter. The audiences in Eastern Ontario appeared more engaged and satisfied with the presentation as it became increasingly detailed in terms of exactly how to select fuel pieces and build and maintain fires to produce maximum efficiency and effective heating. People needed identifiable signals to guide their progress and responded most positively to suggestions involving visual cues and physical actions. Suggestions that seemed to resonate most included: "rake your coals before loading", "fire in cycles", "judge your progress; check your chimney (for smoke)". The findings from this project in terms of message construction and presentation could be refined and expanded to create a new way to communicate with the public about improved wood burning technique.

Throughout the series virtually no resistance to the content was encountered, despite a clear and firmly presented environmental message. While earlier focus group research revealed a tendency on the part of wood heat users to react negatively to statements defining wood smoke as a harmful air pollutant, no such reaction was detected during these workshops. Some tentative conclusions can be drawn from this finding:

- People who heat with wood can be resistant to advice or statements about wood burning from sources they don't perceive as credible on the subject; namely those who don't burn wood. This makes perfect sense; imagine a presentation on tips to improve driving skills delivered by someone without a driver's license.
- People take a quiet sort of pride in their ability to heat their homes with their own labour. Therefore, any hint of condescension or implied censure regarding the fundamental viability of the practice is likely to produce resistance. A basic requirement of a successful presenter is to show respect for the effort and skills involved in wood heating. Once knowledge has been demonstrated and credibility established, clear, unambiguous environmental messages can be delivered and received positively.

The Eastern Ontario BiS workshop series raised the bar for all future such projects in terms of organizational intensity, professional delivery, and impact on public consciousness about the practice of wood burning. The insights gained along the way can form the basis for critical analysis on better ways to deliver meaningful, actionable messages to the public in support of their efforts to burn wood better.

A survey form was created for this project and distributed to all attendees. A total of 728 completed surveys were collected, or 46 per cent of total attendance. Some key findings were that:

- almost three-quarters of attendees heard about the workshop through newspaper ads or articles
- the desire for higher efficiency topped the list of factors motivating attendance by a large margin
- two-thirds of attendees were from rural areas, despite the urban setting of most workshops
- a large majority use wood for heating rather than just for fire viewing
- 37% have an advanced technology, EPA certified appliance, far higher than in the general population
- those who do not have EPA equipment consider higher efficiency the strongest motivation to upgrade

Attendees were also prompted to offer written comments. A sample:

- "Convinced me to upgrade." Perth
- "Worth the drive just to see the outside demonstration." Perth
- "Very educational learned a lot." Brockville
- "As a cook stove owner for over 25 years and now an advanced stove owner it gave me excellent advice. Excellent presentation." Brockville
- "Nice simple PowerPoint well done. Good easy to understand explanations of fires and smoke." Brockville
- "It's about time we had some answers! Both environmentally and efficiency." Belleville
- "Very informative, nicely done. Lecturer knows his stuff!" Cobourg
- "Excellent answered all my concerns." Peterborough
- "The best presentation I have attended in years!!" Pembroke
- "I learnt more [here] than my past 10 years of wood burning." Pembroke
- "Perfect." Hawkesbury
- "Top notch! Very lively kept entire room listening." Hawkesbury

The Wood Heat Organization Inc.

May, 2004

Results Summary

The Eastern Ontario Burn it Smart workshop series was a highly successful venture by any measure. Envisioned as a ten workshop series through a contribution agreement from Environment Canada, Ontario Region, it was expanded to 14 days of workshop delivery.

Attendance at the workshops was generally excellent. In Belleville, the large hotel ballroom was filled to its capacity and in Perth, the truck bay of the town fire hall was filled far past its capacity. See Table 1. for a summary of dates, locations and attendance figures.

Table 1. Dates, locations and attendance at the workshops

#	Date	Location	Attendance
1	Feb. 10	Ottawa	200
2	Feb. 11	Perth	310
3	Feb. 12	Brockville	200
4	Feb. 16	Kingston	115
5	Feb. 17	Belleville	230
6	Feb. 18	Cobourg/Port Hope	60
7	Feb. 19	Peterborough	96
8	Feb. 23	Pembroke	105
9	Feb. 24	Hawkesbury	98
10	Feb. 25	Cornwall	110
11	Feb. 26	South Mountain	65
12	Feb. 27	Ottawa Cottage Show	Small groups
13	Feb. 28	Ottawa Cottage Show	Small groups
14	Feb. 29	Ottawa Cottage Show	Small groups
		Total Attendance:	1589



Above: The capacity crowd of 230 at the Belleville workshop.



Above: Mitch Preece of Embers (Perth) had this big Ottawa crowd's complete attention at the burn display until just before the workshop started.

Additional Sponsorship Support

The initial level of financial support to this project by Environment Canada, Ontario Region, while it was generous at \$20,000, and substantial when combined with the in-kind contribution of the Wood Heat Organization of \$8,700, was not judged to be sufficient to meet our objectives, which were:

- 1. To have a greater impact on public perceptions of wood burning than just among those people who attend a workshop
- 2. To use the series as a research opportunity to assess the public response to various content and presentation strategies
- 3. To demonstrate that a high quality of workshop marketing and delivery, even though it is costly, produces a greater overall impact and better value for resources expended than a more modest approach
- 4. To achieve the above objectives without compromising existing programs maintained by the Wood Heat Organization.

The expanded schedule, from ten to fourteen workshops, was made possible mainly by additional sponsorship support from both public and private sector agencies. The Ontario Ministry of Environment backed the series as part of its mandate to reduce toxic pollution in and around the Great Lakes. A number of the principle hearth product manufacturers and insurance companies were invited to participate in the project by contributing sponsorship money. The response from those companies was so positive that the search for sponsorship support was terminated shortly after it began because the initial budget projections were exceeded. Wood Energy Technology Transfer Inc. has supported the BiS campaign since its inception, but got involved in the Eastern Ontario project specifically to help promote the linkage between effective wood heating and the technical support provided by WETT certified professionals. Below is the list of sponsors.

Environment Canada, Ontario Region
Ontario Ministry of Environment
Farmers' Mutual Insurance
ICC/RSF (Industrial Chimney Company/Renewable Solid Fuel)
Jotul USA
Napoleon (Wolf Steel)
Pacific Energy
Regency (Fireplace Products International)
Selkirk Canada
Wood Energy Technology Transfer Inc.

What the additional sponsorship support bought

The expanded project budget, from the initial Environment Canada contribution of \$20,000, to a total budget of \$34,500 (\$43,200 including the WHOi in-kind contributions) made a big difference in what this project could achieve. These are some of the results of the larger budget:

- 1. An aggressive advertising budget: a total of \$8500 was spent.
- 2. A greater level of effort could be expended on the development of good quality ads, media releases and articles
- 3. A greater level of effort could be expended on the series of advance contacts with local partners and media agencies
- 4. Larger venues could be rented, some costing as much as \$400, to handle the anticipated large audiences

- 5. A public address system, including two wireless microphones, was rented for the entire series and this turned out to be a wise decision because, without it at some venues, the presenter would simply not have been heard; audience satisfaction levels benefited from the decision to use a sound system
- 6. Both John Gulland and Cal Wallis could be present for all but two workshops, and this had a number of benefits:
 - a. the workshops were well-organized logistically, meaning that the public saw a calm, professional event, focused, not on its own problems, but on the needs of the audience
 - b. good coordination of local partners' volunteer efforts between the two main elements of the workshop: the burn trailer and the presentation
 - c. while John Gulland delivered the presentations, Cal Wallis would use any available time to observe audience reaction, which allowed effective debriefing sessions after each workshop and produced real improvements to both the PowerPoint presentation and the spoken presentation as the series progressed
- 7. This final report has been distributed to the sponsors and partners and to other interested agencies. The report contains a series of insights and lessons learned during the project that should be useful to any agencies contemplating the delivery of wood burning-related public information initiatives.

What we learned

A personal note from John Gulland

This project changed the way I think about a lot of things, but most notably, how to talk to people about wood burning. Back in 1981, as a recently self-declared consultant, my first job was to write a draft wood heat chapter for The Billpayers' Guide to Heating Systems, published by Energy, Mines and Resources (NRCan's predecessor department). Since then I have written many booklets and pamphlets on wood heating issues, believing that each one was a little better than the last attempt to explain these issues effectively. My colleague, Cal Wallis, had honed his wood heat communications skills over 20 years as a high-profile Eastern Ontario wood heat retailer and well-known analyst and commentator on wood heat issues. But for Cal and I, the BiS series in Eastern Ontario was like going to wood heat communication school for three weeks.

I have long known that a segment of the wood heating demographic are deeply suspicious of wood heat experts (all of my local male friends fall into that category, I think). People who have successfully heated their homes with wood for several years have reason to believe they know what they're doing and don't need some expert making them feel inadequate about their skills. Focus group analysis done during the development of the BiS materials revealed this resistance:

Focus group participants were asked to provide their reaction to the following statement, attributed to the Canadian Lung Association:

Breathing wood smoke emissions is like breathing in second-hand cigarette smoke. Wood smoke pollutants can be very harmful to the development of young children's lungs.

A number of participants said they did not believe this statement, particularly the English-speaking groups. They said, "Prove it to me." This statement was read to participants after a short break in the focus group. While the first part of the groups were congenial, after this statement was read, the tone of the group was more hostile. Wood Burning Focus Groups, GPC Research, January, 2001

Wood burners can be a prickly lot, and breaking through that kind of resistance to promote behavioural change was to be our challenge. While many, if not most, people who heat with wood claim to have confidence in their skills, I see evidence of an underlying uncertainty related to the private, often solitary nature of the practice of wood burning, and that this gives rise to a thirst for information, if only the desire for confirmation that they are on the right track. The key is to find a way around the outward confidence and past the resistance to tap into that underlying uncertainty.

The workshops were scheduled to begin at 7:00 pm and end at 9:30 pm. With a short break and the inevitable delays, we knew in advance that we had to compress the content delivery to fit it into a roughly two-hour period. We made a commitment to each audience as the workshop began that it would be over at precisely 9:30 pm, and only once or twice did we go as much as five minutes past that time. There would be little or no time for questions and answers, much less a group dialogue, as a means to cover the content. Besides, after working with an audience of 200 at the Ottawa launch, it was apparent that we couldn't dialogue with that many people without loosing half the audience to boredom as we pursued one tangent after another. Not satisfied to deliver a simple lecture, however competent it might have been, we decided this workshop had to have a strong performance element to make it enjoyable and to make its key messages memorable. That is what we set out to do.

In the initial workshops we found the audiences enthusiastically responsive towards the end of the evening, but somewhat wary – not engaging and responding during the first half. Cal, who is something of a performance art aficionado, was adamant at our first late-night debriefing sessions, that something had to be done to "grab" people within the first few minutes. To break the ice and establish credibility, we created an introduction scheme that worked well thereafter. I would briefly introduce myself and include a few informal, self-depreciating comments, such as: "I started my career in wood burning in 1978 as a welder in a wood furnace factory. I wasn't a very good welder . . . so I became a consultant." The introduction locates the presenter as a fellow wood burner and as a person whose observations and suggestions may be of value.

Then I would say, "And now you'll introduce yourselves. We're going to take a snap shot of your wood heat community, something you have never seen before. Those of you in the front may wish to turn around to see who does what with wood burning" I would then ask several questions, asking for a show of hands. Questions such as:

- How many use wood to supply more than half of your home heating needs?
- How many heat with wood, but supply less than half of your home heating needs?
- How many of you burn wood in a fireplace, not for heating, but just to watch the fire?
- How many of you live in town?
- How many of you live in a rural area?
- How many of you process your own firewood, including felling the trees?

This process of revealing the ways audience members practice wood burning provides useful insights for the presenter and is interesting for the audience. Judging by the way people turned to see the proportions responding to each question, some of them calling out their estimate of the percentages, the group question-and-response process helped to create a sense of involvement, shared experience and interest, and a relaxed atmosphere.

We compressed the review of appliance categories as a way to save time for other content areas. To avoid getting bogged down on detailed explanations of each category, which might not interest those using other types, we moved rapidly through the categories with the stated objective of putting a photo up on the screen of something similar to what everyone at the workshop uses. I would poll the audience on how many use this or that type of wood burner.

We spent a generous amount of time explaining the how the advanced technology, EPA certified heaters worked. Audiences seemed genuinely interested in this, as if some people previously had the impression that the advanced technologies were mainly advertising hype. However, the visual impact of the burn display, reiterated in the clear explanation, and complemented by the burn trailer video in the presentation, seemed to put to rest any lingering skepticism.

The health message section was received well, although there was little evidence that it had a big impact. The series of health messages seemed to form an essential part of the overall themes of the workshop. We saw no evidence of denial that wood smoke is air pollution and that exposure to it is unhealthy, despite the fact that this problem has been reported by GPC and elsewhere. I think we can assume that the context of this message's delivery, early in the second half when rapport and credibility had already been established with the audience, made the difference between resistance and acceptance. The one part of the health section that did seem to resonate with audiences was the discussion of household garbage burning and the link to toxic emissions (see below).

The most effective sections were on firewood and burning without smoke, perhaps because we put more effort into them than to the others. We also tended to promote them early in the evening as the real nuts and bolts of the workshop that previous audiences had enjoyed the most. We got active questions on firewood issues and apparently good buy-in on key recommendations. This is

one section in which direct, personal experience of the presenter is important in establishing credibility and in conveying key messages with appropriate emphasis and impact. Being able to empathize with audience members' sore backs, worn out leather gloves, slivers, and the shame and frustration of having to burn wet firewood reinforces the veracity of crucial messages about air emission impacts of burning wet firewood. At each workshop I asked how many people process their own firewood, including cutting down the trees, and we were always surprised that between 20 and 40 per cent of our audience members did all their own processing. Obviously, a presenter without some experience in firewood production could claim no credibility in attempting to influence this segment of our audiences. This point was illustrated in a light hearted way at the Pembroke workshop when I admitted that, despite heating with wood for thirty years, this was the first year I had processed all our firewood entirely on my own. A middle-aged man sitting with a couple of his friends near the front was heard to snort, "Humph, amateur!", or words to that effect, producing a hearty laugh from those near him.

Maybe the most significant finding from this project was revealed most during the delivery of the section on burn techniques. It appeared that the more specific and detailed the suggestions were, the more interested audience members were in hearing them. This hints at the underlying uncertainty mentioned earlier. The challenge has always been to find the valid generalizations that would be applicable to the majority of wood burning devices, despite the wide range of design and configuration. The six tips developed in the Fall of 2003 and incorporated into the revised BiS PowerPoint presentation were:

- 1. Burn hot, bright fires
- 2. Before loading, rake your coals (towards the air inlet)
- 3. Burn in cycles
- 4. Use smaller loads in mild weather
- 5. Let the space cool a little before loading
- 6. Fire each load hot before turning down

These worked fine and created the opportunity to explain in some detail how to build a fire to achieve a particular result. In fact, as the presentation evolved toward the end of the series, this section became more and more specific, and apparently more appealing to audiences. Had there been more workshops in the series, or if we have the opportunity to do more BiS workshops in the future, we could implement an idea that emerged from our discussions.

Briefly, the idea is that everyone who heats with wood struggles with one major problem: How to control heat output, or stated another way, how to avoid overheating the house any time the potential output of the heater far exceeds heat demand, a problem most noticeable in relatively mild weather. Not coincidentally, this problem also gives rise to serious air emissions because the simplest way to reduce heat output – reducing combustion air supply – leads to smoking and low efficiency, particularly in conventional equipment. So, if we can help people to control heat output while maintaining good efficiency, we can also help them reduce smoke emissions. Some of the ideas below apply to all appliance types, regardless of configuration, and others can be applied only to the majority in which combustion air reaches the fire at the front, just inside the loading door. None of the methods is new; it is their packaging and presentation that is different.

Five ways to control heat output

If you just turn down your air control to reduce heat output, you risk wasting fuel in the form of smoke and creating a lot of creosote and air pollution. Here are five different ways to control heat output. Use as many of these techniques as you can:

- 1. **Fuel species:** use lighter woods like spruce, pine, poplar and willow in mild weather and save harder woods for colder weather.
- 2. **Amount:** Smaller loads of wood make heat output easier to control in mild weather. Larger loads are effective in colder weather to produce longer, higher output burn cycles.
- 3. **Orientation:** wood placed east-west in the firebox breaks down relatively slowly, so this is a good orientation for extended fires in mild weather. North-south configuration permits more fuel to be loaded and it breaks down more quickly because the heat and flame can penetrate the load more readily, which is suitable for over night fires in cold weather.
- 4. **Configuration:** Pieces loaded in a crisscross configuration break down quickly, so this can be a good way to build a short, hot fire just to take the chill off a space without overheating it. Crisscross loading is effective any time, even in cold weather, if you don't need a long burning fire. Compact loading is effective for long firing cycles because the wood breaks down more slowly as it is heated.
- 5. Air supply: Note that reducing air supply is only one of five ways to control heat output and that it is last on the list. Use all the other strategies first, before turning down the air. By using the four previous methods first, you can maintain brightly flaming combustion without overheating the space and creating air pollution.

This presentation model could be more fully developed and adapted for use in BiS public information materials.

Ideas that most resonated with audiences

Organics + chlorides = toxins

When organic materials like wood and paper are burned in the presence of chlorides, dioxin is produced. Salt water driftwood contains sodium chloride; a common plastic is PVC - polyvinyl chloride; paper is bleached using chlorine. When household garbage is burned in a wood heater or a backyard burn barrel, a toxic cocktail of chemical emissions is released. This message was met with surprise, but was never challenged. Clearly audiences believed what was said and some people said afterwards that this was new knowledge and was the most compelling thing they heard all evening.

Ugly wood piles

Picture perfect wood piles with uniform piece size and pie-shaped end profiles of maple and oak are made up of straight grain logs which should probably have been made into something lasting like furniture or flooring, not burned as firewood. Ecological wood piles are ugly, with bent and twisted pieces, a variety of diameters and piece sizes down to 50 mm sticks. Audiences clearly enjoyed this aspect of the discussion. Each group was asked, just for interest sake, if they ever processed and burned poplar firewood, as a kind of surrogate for what are considered junk species. A surprisingly large number always raised their hands, and really seemed to enjoy the idea that they shared a kind of secret; what some people considered junk, they found an excellent fuel, especially during mild weather, but only if properly seasoned.

• Prime time for firewood seasoning

Firewood piles need to be in the open, exposed to sun and wind for the summer months and especially those blazing hot July and August days when the sun is so strong you don't want to

be out in it. This is prime time for firewood seasoning. The objective is for each individual piece of firewood to get enough sun to get hot right to its core. If each piece can get hot while a breeze takes away the moisture as it is driven from the wood, drying does not take long. Addressing the particular rather than the general seems to have been effective during these workshops. Discussing the role of sun and wind in the drying of a single piece of firewood clarifies the objectives and gives more meaning to the general recommendations.

Wood smoke is fuel

More than half of the energy content of each piece of wood is released as smoke and the rest is in the residual charcoal. Any smoke that escapes from the firebox unburned is wasted fuel that will stick in the chimney as creosote or be released as air pollution. Wood smoke is not a normal by-product of wood combustion; it is waste. This may appear elementary, but apparently it is not. Maybe the observation resonated with people because it relates to the general interest in efficiency, or maybe it just offered an interesting new way to look at firewood and wood smoke.

• Before loading, rake your coals

If the coal bed is spread level and fuel is placed on top, the load will smoulder for half an hour before igniting, and when it does ignite, it will do so all at once, which can overwhelm the combustion system. Instead, remove a little ash from the front of the firebox, then rake the coals towards the door and air inlet, then place the new fuel on and behind the coals. This strategy produces a more controlled release of the smoke (fuel) from the wood and makes efficient combustion much easier.

This message made a big impression on a lot of people, which surprised us. While raking is a simple act, it links to a number of related ideas and techniques, such as "wood smoke as fuel" and "fire in cycles" which together create an integrated strategy for managing fires. Retailer Vanessa Percival reported that the day after the Perth Workshop she had four customers wanting to buy rakes.

Fire in cycles

Don't add one or two pieces of wood each hour in an attempt to maintain steady heat output. At least three pieces should be added each time to create a kind of triangular geometry between the pieces where flaming combustion first takes hold and is sustained. Wood burns best in cycles. A cycle starts when the coals are raked and wood is loaded, and ends when the load has been reduced to a coal bed of the same size.

One woman admitted sheepishly after a workshop that she was a one-log-an-hour person. I had the impression she would not go back to her old ways.

• A social consensus

Over the past twenty years, Canadians have come to agree that drinking and driving is not acceptable. The designated drivers are identified at most parties, and people will try to prevent friends and relatives from driving after drinking. Perhaps it is time to agree among ourselves that discharging smoke from our chimneys is not socially acceptable behaviour. Maybe now when we see smoke coming from our own chimney, we should feel a little pang of shame and take action to correct it.

Obviously, this message can be delivered in a way that is condescending and offensive. And yet, presented at the conclusion of the workshop in the context of all the other information presented, it was met with an almost palpable impression of a group consensus.

All of the lessons learned from the Eastern Ontario BiS workshop series have still not been fully processed and refined. Continuing work in this area could yield more effective message structure and presentation strategies.

Advertising

The original promotional strategy was to launch the series in Ottawa and use the reach of Ottawa's electronic and print media to create advanced knowledge and some "buzz" about the campaign in the entire region. The thinking was that radio interviews on CBC and other stations and participation in a wood heat-related CBC radio Ontario Today 1:00 - 2:00pm weekday phone-in show would create widespread awareness throughout the region and would increase the recognition of the ads in local community newspapers in the towns and cities where workshops would be held. Unfortunately, despite at least three contacts in the form of media releases and articles combined with phone follow-up to most media outlets, there was a disappointing response from the media. Our lack of success could have been related to the fact that Auditor General Sheila Frazer's report exposing the federal sponsorship scandal was made public the day of our launch, preoccupying the Ottawa media for two days before and several days after her news conference.

We had a good 10 minute interview on In Town and Out, CBC radio Ottawa's 6:00am - 9:00am Saturday morning show, but that show is not heard outside the greater Ottawa area. The Ottawa workshop was covered briefly on the CTV Ottawa affiliate's 11:00pm news program that evening, Brad Leonard of the Renewable Energy store in Kingston was interviewed on a local station, and the workshops were mentioned in a few announcements segments on local radio, but these were the only electronic media uptake we achieved, which was a serious disappointment considering the effort expended. Attendance at the workshops could have been even higher if we had been more successful with the media.

Display ads were placed in the principal newspapers in each town or city. The ads were reasonably large, usually between 5 and 7 inches wide. A complementary poster was also created and sent to local partners to post in their stores and around town. A sample poster is included in Appendix A.

Considerable analysis and discussion was devoted to selecting and refining the key messages, prompts and calls to action that appeared in the ads and posters. In the final versions of both ads and posters, the key messages were:

Burn it Smart in your wood stove, fireplace or furnace.

A free workshop to help you burn wood better.

A non-commercial, educational event for people who burn wood at home. Presented by some of Canada's most experienced wood heat specialists

- Learn things you didn't know about wood burning
- Take home loads of great wood heat publications
- See a dramatic burn display comparing an old "airtight" to a new technology stove

Get your questions answered

How to buy firewood and get what you pay for.

Find out if your wood burning system is up to date.

Trained experts on hand to answer your questions.

Based on responses to the survey and to insights gained in previous work, the ads should have highlighted the issue of efficiency. On the other hand, it appears that ads were effective as the main source of notification and worked to the extent that attendance was high.

Notification, motivation and coordination of local partners

Although a combination of factors led to the extraordinarily large audiences in Eastern Ontario, the central and likely most important component was the personal contact by phone and email with the local partners and media for each workshop. Cal Wallis did the majority of this work for all but one of the locations.

It is important to hold workshops during periods in which people are heating with wood. February is ideal. January is reliably cold, and by February people are ready to consider strategies that would save them effort, fuel, and maintenance. They are most receptive to new ideas and techniques that they can go home and try out immediately. The decision to upgrade to a new stove is often made months before the actual purchase takes place. Dissatisfaction with an old stove or furnace likely peaks during February after a long winter of frustration with it. This is an excellent time to reinforce the many advantages of advanced technology appliances.

Sufficient lead time is essential for this type of project, and in this case it was inadequate. By the time agreement had been reached with Environment Canada so that work could begin it was mid-December, a difficult time to get people's attention for on a new project. A high-intensity effort was needed early in the new year to recruit local partners. Once it was decided to take on this project, WHOi tackled it with enthusiasm and energy, and this was certainly transmitted to every person contacted.

Cal's early efforts to engage fire departments with the project met with good success in several communities. Burn it Smart is a difficult concept to communicate in a "cold call", but the building and fire officials who listened for a while and "got it" were very enthusiastic. Fire departments provided local context and great enthusiasm for these events, and they also work effectively with other partners like wood heat retailers. Studies have shown that fire departments are the most trusted source of wood heat safety information. The presence of a group of smiling firemen in uniform at a workshop automatically confers a degree of credibility to our communications efforts.

Cal reports that different approaches work in different places. Every region and town is different, but in general, local hosts, whether business people or public servants, came to understand that Burn It Smart was legitimate, non-commercial, highly targeted, came at the right time of year, and just might be successful.

Early in the process Cal literally spent days on the phone identifying, recruiting and briefing potential partners. Persistent calls and detailed conversations helped local partners grasp how their active participation in the event could further their interests and help their neighbours or clients. We offered them a local event they could be proud to be associated with and that could be considered a significant "outreach" effort.

The Burn Trailer Display

During the Burn it Smart campaign the use of a burn display to demonstrate the performance of advanced technologies has been seen as an indispensable tool for communicating with the public. The Eastern Ontario BiS series was no exception.

Some of the attendees complained that they couldn't see the stoves in the burn trailer because so many people were standing around them. To some extent, the effectiveness of the burn display was compromised by the success of the series in attracting so many people. On the other hand, the three minute video clip of the burn trailer in the Power Point presentation probably compensated for the fact that many people did not have an opportunity to see the burn trailer close up.

Results of the Participant Survey

A total of 728 completed surveys were collected, or 46 per cent of total attendance. All responses were compiled in order to develop a profile of the people who attended the workshops. Note that this sample is only representative of people who are interested enough to attend an evening workshop and to fill in a survey form. On the other hand, some useful insights can be gained from an analysis of the results.

How did you hear about the workshop?

58% Newspaper Ad 14% Newspaper story

9% From a friend or neighbour [add "or relative"]

7% Other

5% Stove/fireplace retailer

4% Television or radio ad [add "or interview"]

2% A letter inviting me1% Phone call inviting me

Newspaper ads were by far the most effective method of advertising, even though a great deal of effort was invested in articles, media releases and other forms of announcement. Newspaper stories were also effective, and appeared in newspapers in at least the following towns and cities:

Brockville Kingston

Belleville Perth (two printed, one a feature article)

Cobourg Winchester

Cornwall Smith Falls (two were printed)

Hawkesbury Lanark

No television or radio advertising was done. There was some television news coverage of the workshops in at least Belleville, Ottawa and Kingston, and radio coverage in Ottawa, Kingston and Hawkesbury. It is noteworthy that word of mouth was the third most common way people heard about the workshop.

Most of the 1% response to "Phone call inviting me" was the result of an Ottawa Algonquin College teacher who called many of his oil burner mechanic program students over the weekend suggesting strongly that they attend the Ottawa workshop. We estimate that about 15 of the students attended. Unfortunately, the instructor was not able to attend, so we couldn't thank him for his lead. Still, this instructor's example suggests that technical schools might be good places to promote such workshops in the future.

What prompted you to get more information?

Wanted information on efficiency

62% Want to lower heating costs

45% Safety concerns

38% Health or environmental concerns 30% Firewood purchasing and storage 25% Planning to upgrade my system

12% Other

Efficiency ranks highly as a motivation to seek out and be receptive to information. A desire to lower heating costs, which is strongly linked to the concept of efficiency, ranked second in the list. Earlier focus group research involving wood users that was conducted to inform the development of the Burn it Smart campaign found that: "Rising fuel costs, of electricity, natural gas, and oil as heating and cooking fuels, were a main concern among focus group participants." (GPC 2001, for NRCan) The quest for efficiency extends to people's use of firewood, whether purchased or self-processed. As was apparent during the workshops, the term efficiency means different things to different people. For many wood users, the word efficiency appears to include aspects of convenience, effectiveness, comfort, neatness, the elimination of smoke spillage into the room, as well as the reduction cost and physical effort.

Concerns about safety, health and environment were also important motivators. The fact that efficiency, safety and health were reported as the strongest factors motivating attendance at these workshops is not surprising, for two reasons. First, earlier research and analysis had already revealed these three ideas as most influential, and, as a direct result, the Burn it Smart campaign is framed around them and each of the audiences had heard those themes repeated several times during the workshop and before they responded to the survey. The second slide in the presentation, titled Objectives of the Workshop reads:

To help you:

- burn wood SAFELY
- burn wood more EFFICIENTLY
- keep your family and community **HEALTHY**
- And to answer your **BURNING QUESTIONS**

It is likely that part of the appeal of the workshops is related to its tight focus on issues known to be of primary interest to people who burn wood at home.

Where do you live?

49% Rural other 18% Rural farm 14% Small town 13% Urban 6% Suburban

Two-thirds of all attendees identified themselves as living in rural areas, despite the fact that most of the workshops were held in relatively large urban centres. Only a fifth of all attendees were from the urban/suburban categories, which is surprising for three reasons: the urban locations of most workshops, the placement of newspaper advertising, and the population density in urban centres. This raises a question regarding the extent to which people living in urban areas and using fireplaces or wood stoves on a casual basis are motivated to attend such events. It also raises questions about our marketing strategy, since it did not specifically target urban issues. For example, to appeal to urban wood users, the ads might have been more specific by using phrases like:

- Does your fireplace smoke? Learn how to solve the problem.
- Boost the efficiency and convenience of your wood burning fireplace.

Do you use wood fuel for:

57% Heating7% Fire viewing36% Both

Clearly, our advertising appealed to people who heat with wood, and was not as effective in reaching those who use fireplaces just for aesthetic purposes. It was appropriate then, that the workshop we delivered was oriented mainly to wood heating, as opposed to strictly fire viewing.

A word of caution about the 36% who responded that wood is used for both heating and fire viewing. This group is made up of two possible sub-groups: people who heat with stoves and inserts with glass airwash so they can see the fire, the majority of which would be advanced technology units; and those who see their conventional fireplace as providing some heat, even if at relatively low efficiency. Many people see their wood burning fireplace at least partly as a heater, even if it is inefficient.

What is your main home heating fuel?	What is your supplementary heating fuel?
40% Wood	46% Wood
22% Oil	31% Electric
20% Electric	16% Oil
14% Gas	4% Gas
4% Propane	3% Propane

Those who claim wood as their primary heating fuel are more likely to use oil and electric systems as their backup than natural gas. Those who claim wood as a supplementary fuel are far more likely to have an electric backup system than oil. Among this group of supplementary wood users, gas and propane are rarely used.

These results probably reflect the rural location of most attendees where natural gas is not available and propane is prohibitively expensive. A more urban audience would have been much more likely to use natural gas in combination with wood.

About how much wood do you burn?

36% 1 cord to 3 cords 31% 3 cords to 5 cords 19% more than 5 cords 14% less than 1 full cord (4' x 4' x 8')

When asked how much wood they burn each year, there is a tendency for people to overestimate. This is particularly true when the question is simple such as the one we asked. However, in this case the distribution of annual wood consumption claims is roughly consistent with the most accurate surveys conducted in Canada.

To illustrate, 1 cord to 3 cords is an amount consistent with supplementary use for heating; and 3 cords to 5 cords is consistent with primary use in medium-sized, relatively new houses. Consumption of more than 5 cords suggests the heating of older, larger farm

community houses. The casual use of wood in fireplaces normally consumes less than one full cord. This appears roughly consistent with the self-disclosed profiles of attendees and shows no obvious signs of over-estimation of the kind seen in some surveys of wood consumption.

Do you have an advanced, EPA certified stove or fireplace?

37% Yes 63% No

The proportion of people who came to these workshops and who use EPA certified equipment is far higher than the presence of EPA equipment in the general population of wood burners, which is less than 10%. This might suggest that some of them were encouraged to attend by wood heat retailers, and may also mean that the kind of people likely to attend a BiS workshop are, in terms of wood burning, early adopters or trend setters. This raises the question of the extent to which these people may be influential within their circle of friends and communities in the recognition of wood smoke as air pollution and promoting improved wood burning practice. If the data base of names and contact information from these surveys is used for follow up study, such a question might be worth exploring.

If not, what would motivate you to upgrade?

70% Higher efficiency36% Safer system30% Air quality concerns10% Beauty of the fire8% Other

Once again, efficiency, safety and health/air quality top the list of motivating factors. Clearly, however, agencies wishing to promote changeouts of old technology wood burning appliances for new should highlight efficiency in order to resonate with current users of conventional stoves, inserts, furnaces and fireplaces.

How do you like the workshop?

Great	SoSo	Poor	
92%	7%	1%	Presenters
93%	6.5%	.5%	Handouts
92%	7.5%	.5%	Visual aids
85%	14%	1%	Burn trailer
87%	12.5%	.5%	Location/venue/setting
87%	13%		Answers to questions

Satisfaction levels with the workshops was generally high in the areas of presentation, handouts and visual aids. There were some written complaints about inability to see the burn trailer, with more than one person suggesting the stoves be raised to be more visible. However, this complaint was mainly related to the large crowds wanting to see the display

with only those in the first few rows being able to do so. Overcrowding in some venues caused a few complaints.

There was a somewhat negative response on answers to questions. The problem has two possible dynamics. First, as pointed out in writing by one person, the event was really more of a lecture than a workshop, a term that implies an active dialogue among participants. The presentation content is largely prescribed by the imperatives of the BiS campaign and its delivery within the available two-hour period is very tight. Even when tightly scripted and delivered with a minimum of rambling personal examples, there was little time for questions and answers. This factor undoubtedly caused frustration among some attendees.

The second possible dynamic could be inadequate or inappropriate responses by the presenter to questions posed by audience members. Under time pressures, some answers were kept short and in a very few cases the behaviour of a participant would lead to an abrupt response from the presenter. At the Ottawa launch a brief exchange with a vocal and persistent person resulted in the following two written comments from the survey:

"There is an edge to this facilitator. I didn't like it when he cut people off without respect. Otherwise he is very informative."

"Near the end people began to get personal and hijacked presentation. You are an excellent presenter - perhaps ask the know-it-alls why they attended."

These two very different responses to the same exchange illustrate clearly that people experience events in their own way and that what one person approves of, another may not. How and when to handle a problem participant comes down to an on-the-spot judgement call by the presenter based on how the interests of the majority of the audience will be best served. Not everyone in a given group will agree with the call. Considering the amount of information delivered during these short workshops, and the clear, unambiguous way in which the content was presented, wrangles with audience members, even of a minor nature, were extremely rare, as revealed by the overall tone of the written comments.

See Appendix G. for detailed survey results from each workshop, including all the written comments.

Budget Report

The table below shows the way resources were expended. Figures have been rounded.

Revenue	\$34,500
(not including $\$8,700$ in-kind from WHOi)	
Advertising	\$8,500
Venue rental	\$600
Refreshments	\$650
Sound and projector	\$1,220
Accommodation and meals	\$730
Travel and miscellaneous	\$1,800
Development labour	\$7,200
Delivery labour	\$7,800
Report preparation	\$5,000
Report production and distribution	\$1,000
	\$34,500

Appendix A. Sample poster



Burn it Smart!

In your wood stove, fireplace or furnace

A free workshop to help you burn wood better

Monday, February 23, 2004 Germania Hall, Pembroke 15 Bennett Street

Burn display 6:30 pm Workshop 7:00 pm to 9:30 pm

A non-commercial, educational event for people who burn wood at home. Presented by some of Canada's most experienced wood heat specialists

- Learn things you didn't know about wood burning
- Take home loads of great wood heat publications
- See a dramatic burn display comparing an old "airtight" to a new technology stove
 Get your questions answered

www.burnitsmart.org

Canad'ä

















Trained experts on hand to answer your questions.

How to buy

pay for.

date.

firewood and get what you

Find out if your

system is up to

wood burning

This series is made possible by a contribution agreement from Environment Canada Project coordinated by The Wood Heat Organization Inc. **www.woodheat.org**Burn it Smart! is a trademark of Natural Resources Canada. Used with permission.

Appendix B. Initial media release





For Immediate Release

Date: January 12, 2004

Contacts: John Gulland (613) 757-2290; Cal Wallis (613) 278-2161

The Wood Heat Organization Inc.

10 BURN IT SMART WORKSHOPS SLATED FOR EASTERN ONTARIO IN FEBRUARY 2004

Popular workshops offer tips on safe, efficient and less polluting use of wood stoves, furnaces and fireplaces

Eastern Ontario householders who burn wood for heat and enjoyment will be invited to attend one of ten evening workshops to be held throughout the region this winter. The workshops will be delivered by trained wood heat specialists offering useful insights and tips on effective wood burning. Those attending will be treated to a dramatic technology demonstration and a range of free publications on wood burning to take home.

The workshop series is being organized by the Wood Heat Organization Inc., a non-profit group that promotes the responsible use of wood fuel at home. John Gulland, the group's executive director, says such workshops have proven highly popular wherever they have been offered. "People really enjoy these events because they discover that their interests and concerns about wood burning are shared by just about everyone else."

He says that typical questions are: Am I operating my stove (or fireplace, or furnace) correctly? Is my wood burning system up to date? How can I identify good firewood and how can I avoid being ripped off? "These are exactly the kinds of questions the workshop will answer", he says.

Although the sites have not yet been finalized, workshops are expected to be offered in Ottawa, Perth, Peterborough, Kingston and Pembroke, while other locations such as Cornwall, Belleville, Trenton, Coburg, Hawksbury, Bancroft and Barry's Bay are being considered.

Gulland and his colleague Cal Wallis are working now to involve sponsors for both the full series and the local events. The participation of sponsors and local partners will help publicize the workshops and complement the seed money provided through a contribution agreement with Environment Canada, Ontario Region. "Besides", says Gulland, "inviting

related business and other agencies to get involved allows them to link up with a worthwhile and popular campaign."

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More . . .

Tens of thousands of families in Eastern Ontario burn firewood in wood stoves, furnaces and fireplaces. Using wood involves taking an active part in heating the home, and in addition to saving on home heating costs, tasks such as managing the firewood supply and tending the fire can be enjoyable and satisfying. But like the other energy sources, there are environmental impacts when wood is burned for home heating and enjoyment.

The main impact is the smoke, a problem having two dimensions: the community and the neighbourly. At the community level, topography and climate can conspire to trap smoke close to the ground. The pollution is visible in some Eastern Ontario communities on calm winter mornings. It is also unpleasant and downright unhealthy, especially for children, the elderly and those with respiratory sensitivities. A different kind of problem arises when one household's wood smoke is so dense that the neighbours are driven indoors and even there the smell permeates clothes, rugs and drapes. Both problems are serious and together they can give wood burning a bad name.

But there are several practical steps householders can take to reduce wood smoke, including better fire stoking technique and upgrading to one of the new advanced technology wood stoves or fireplaces. Wood smoke can be reduced considerably if fires are built and maintained correctly. Advanced stoves certified for low emissions by the US Environmental Protection Agency (EPA) emit about ninety percent less smoke than older conventional "airtights".

Appendix C. A brief early announcement of the event



Burn it Smart in your wood stove, fireplace or furnace

Free workshop to help people burn wood better __day, February ___, 2004 Venue name Address The workshop starts at 7:00 pm and concludes at 9:30 pm, sharp. People are encouraged to arrive at 6:30 pm so they can view the outdoor burn display. _ area householders who burn wood for heat and enjoyment will be invited to attend an evening Burn it Smart workshop to be held in the city on __day, February __. The workshop at the Venue*** will be delivered by trained wood heat specialists offering useful insights and tips on effective wood burning. Those attending will be treated to a dramatic technology demonstration and a range of free publications on wood burning to take home.

The Burn it Smart campaign was initially developed by Natural Resources Canada to promote the more efficient, safe and healthier use of wood for home heating and enjoyment. The Eastern Ontario Burn it Smart workshop series is being organized by the Wood Heat Organization Inc., a non-profit group that promotes the responsible use of wood fuel at home. Cal Wallis, one off the organizers says, "People will be amazed how much practical knowledge useful information they'll pick up at this workshop. No one who burns wood at home should miss it".

230 words

For more information visit www.woodheat.org	g/bis/
Or call Mr. Local Organizer at (613)	_
	-

Appendix D. An article promoting the Ontario program

Designed to convince CBC Ottawa to schedule an Ontario Today 1:00pm - 2:00pm phone in show on wood burning





January 21, 2004

Wood burning: A public discussion about a private pursuit 40 free workshops will be delivered across Ontario this winter

Considering that so many of us relax in front of a wood stove or wood burning fireplace, or keep a wood furnace stoked each winter, we sure don't talk about it much. When was the last time you saw an in-depth newspaper or magazine article on the subject? A television or radio show that looked into how and why people burn wood? No, wood burning is a private, personal activity that many engage in but rarely acknowledge outside the family.

According to surveys conducted for Environment Canada, almost one in four Ontario families burn wood at home. In fact, not counting apartment dwellers (hardly any burn wood), almost one in three Ontario homeowners burns wood. A cottage or camp would hardly be worthy of the name without a wood stove or fireplace to take the chill off. It seems lot of us do it and yet we almost never talk about it in public forums.

But that is changing this winter as small bands of activists fan out across the province to spark a discussion about burning wood for heat and enjoyment. Equipped with boxes of brochures and booklets and towing a mobile display, they are hosting forty gatherings in towns and cities from Sarnia to Cornwall and Pembroke to Thunder Bay. These evening workshops, promoted under the banner "Burn it Smart!", are aimed at helping people burn wood in safer, more efficient and healthier ways. Environment Canada's Ontario regional office contributed some seed money to get the project off the ground, and dozens of sponsors and local partners are advertising the workshops and encouraging their customers and colleagues to attend.

What accounts for the popularity of wood burning in a high-tech world of computers, cell phones and rockets to Mars? People who use a fireplace just to watch the flames tend to treat wood burning as a casual hobby that enhances a comfortable lifestyle. But families that heat their homes with wood, partly or totally, have a deeper attachment. While cost savings are always mentioned as a factor, most wood burners can give several other reasons for going to all the trouble of cutting and splitting and stacking firewood. According to the web site of the Wood Heat Organization Inc., a non-profit group dedicated to responsible wood heating and one of the organizers of the Burn it Smart workshops, do-it-yourself independence and shelter from high energy prices and electrical power failures are high on the list of motives.

It might come as a surprise to those who haven't tried it, but there are a lot of skills involved in successful wood burning. Just about everyone who attempts it has had a disastrous experience lighting a wood fire, ending up with a smouldering mess, a smoke filled house, singed fingers, or all three. John Gulland, one of the organizers, claims that maintaining wood fires takes practice. "After twenty five years of heating with wood, I'm still working on my technique," he says.

Even buying decent firewood is a challenge for most of us. How can you tell if the wood is good or if you are getting your money's worth? And once you do make a purchase, how do you respond to your brother-in-law when he insists that he could have got it for half the price?

A key goal of the workshops is to provide advice on how to convert wood smoke into usable heat. Not only do good burning practices increase heat output while reducing wood consumption, they also reduce the risk of chimney fire, and result in less smoke pollution that can poison the air in a community on a cold winter night.

Building good fires, buying good firewood and reducing smoke are just a few of the topics to be discussed at the Burn it Smart workshops. A night out to hear from some of Canada's most experienced wood heat specialists is a great opportunity for people to catch up on the latest news from the world of wood burning. Says Gulland, "I'll bet no one leaves one of these workshops without having learned something new and useful."

The full schedule and contact information will be on the Wood Heat Organization web site at www.woodheat.org when it is available. Or contact one of the four organizers directly:

Southern and South-Western Ontario:

Canadian Centre for Pollution Prevention (519) 337-3423 or 1-800-667-9790 e-mail info@c2p2online.com

Eastern Ontario:

The Wood Heat Organization Inc. http://www.woodheat.org/bis/index.htm John Gulland (613) 757-2290 john@woodheat.org Cal Wallis (613) 278-2161 cal@woodheat.org

Central and Northern Ontario:

Hearth, Patio and Barbecue Association hpbacead@on.aibn.com 1-800-792-5284

First Nations Communities:

Ontario First Nations Technical Services Corporation http://www.ofntsc.org/content.html email info@tbay-ofntsc.org (807) 623-9595

Appendix E. Article containing tips to promote up-take by newspapers





Burn it Smart in Eastern Ontario: February 10 - 29, 2004

Newspaper article.

Issued by The Wood Heat Organization Inc.

February 2, 2004

Series contacts: John Gulland (613) 757-2290; Cal Wallis (613) 278-2161

New ideas about wood burning

Tips on safer, more efficient and healthier wood burning

Learning to burn wood properly in a stove, fireplace or furnace involves trial and error. Sure, advice from friends and relatives may help, but separating fact from fiction and good advice from bad can be a challenge. Householders who burn wood for heat and enjoyment mostly just blunder along on their own.

Help is on the way, though, in the form of a free public workshop at the [insert local workshop location and date].

Presented by some of the most experienced wood heat specialists in the country, the workshop will be a good opportunity to pick up some proven and practical tips.

Tips like this: One way to judge the dryness of firewood is by knocking two pieces together. A hollow sound signals the wood is dry enough to burn. A dull thud suggests it is too wet and will be hard to light, slow to burn and give off little heat. Here's another: The wetter the wood, the smaller it must be split to get it to burn.

Buying and preparing firewood will be a key topic at the workshop because so many problems can be traced to poor fuel. According to Jan Herald, a former wood stove retailer and now a respected trouble shooter with Tri-Lane Distributing, "There's an epidemic of wet wood across the province this year and it is causing a lot of problems".

Wood that is not dry enough to burn well is more than just frustrating to use. It is also likely to cause odours in the house, creosote in the chimney and smoke pollution in the neighbourhood. Jan Herald gets called in to solve problems because so many people blame their stoves when bad fuel is the real culprit. "Stoves and chimneys can sometimes be at fault, but not nearly as often as the wood. Even wood that was cut and split six months earlier can be too wet to burn well", she says.

The question of efficiency often comes up in discussions of wood burning, says John Gulland, a staff member with the Wood Heat Organization, coordinator of the workshops. "The question usually has two parts", he says. "People ask what is the most efficient wood burning system and secondly, how they can increase the efficiency of their own wood burning system."

Answering the first question is easy, says Gulland, pointing out that the new generation wood stoves and fireplaces deliver between 60 and 80 per cent efficiency. That is about one-third higher than the old 'airtights' of the nineteen seventies and eighties, and far more efficient than older fireplaces. These new stoves and fireplaces are certified by the US Environmental Protection Agency to produce low smoke emissions.

"While EPA certification only regulates smoke, not efficiency, the good news is there is a strong relationship between smoke pollution and efficiency", he says. "That is, the lower the pollution, the higher the efficiency and vice versa". So, when shopping for a new wood heater, fireplace or furnace, look for models that are EPA certified if you want more heat while using less wood.

The workshop will offer a good chance to see the new technology in action without having to hear a sales pitch on a particular brand of stove. The special Burn it Smart display trailer will be set up in the parking lot with two stoves actually burning. One is an older conventional "airtight" and the other is an EPA certified stove. According to Gulland, the difference between the two is so dramatic, you have to see it to believe it.

Squeezing more efficiency from existing equipment is certainly possible, according to Gulland, but is a little more complicated because of all the design variations among the equipment currently in use. One sure fire way to boost the heating efficiency from any wood system is to avoid letting smoke escape into the chimney by burning it in the firebox. While it is not possible to operate an older stove as efficiently as the new generation units, smoke can be cut substantially and efficiency can be increased by using good burning practices.

Here's another tip: If a wood burning system is not installed safely, it cannot be operated efficiently. That is because efficient burning demands high temperatures at least part of the time. Burning a correctly installed stove, furnace or fireplace hot does not damage the unit or increase the risk of a house fire. But if the operator of a wood burning system is afraid to burn hot because something might overheat, then he or she will not be able to burn cleanly and efficiently. A safe wood burning system is one that meets all the building code rules. Looking after safety is the first step in burning efficiently, say the experts.

"There is both an art and a science to wood burning, and they are equally important", says Richard Kerr, a long-time stove dealer in Hawkesbury, south of Ottawa. A safe installation is means getting the technical part - the science - right. Using the system effectively involves the art of wood burning, he explains.

Mr Kerr, owner of Sunworks, says people who heat with wood develop a kind of bond with their stove, furnace or fireplace, in which awareness of the state of the fire is never far from their minds. "They sense when to load it and how much wood to use each time, based on the time of day and the outside temperature".

He compares wood burning skills to car driving. "You might have a nice new high-tech car, but if you don't drive it well, the outcome can be hazardous and inefficient. It's the same with wood stoves", he says.

Appendix F. Pursuit article specific to Eastern Ontario





Burn it Smart in Eastern Ontario: February 10 - 28, 2004

Newspaper article.

Issued by The Wood Heat Organization Inc.

January 26, 2004

Series contacts: Series contacts: John Gulland (613) 757-2290; Cal Wallis (613) 278-2161

Wood burning: A public discussion about a private pursuit

12 free workshops to be delivered across Ontario this winter

Considering that so many of us relax in front of a wood stove or wood burning fireplace, or keep a wood furnace stoked each winter, we sure don't talk about it much. When was the last time you saw an in-depth newspaper or magazine article on the subject? A television or radio show that looked into how and why people burn wood? No, wood burning is a private, personal activity that many engage in but rarely acknowledge outside the family.

According to surveys conducted for Environment Canada, almost one in four Ontario families burn wood at home. In fact, not counting apartment dwellers (hardly any burn wood), almost one in three Ontario homeowners burns wood. A cottage or camp would hardly be worthy of the name without a wood stove or fireplace to take the chill off. It seems lot of us do it and yet we almost never talk about it in public forums.

But that is changing this winter as a small band of activists fan out across Eastern Ontario to spark a discussion about burning wood for heat and enjoyment. Equipped with boxes of brochures and booklets and towing a mobile display, they are hosting a dozen gatherings in towns and cities from Peterborough to Cornwall and Ottawa to Pembroke. These evening workshops, promoted under the banner "Burn it Smart!", are aimed at helping people burn wood in safer, more efficient and healthier ways. Environment Canada's Ontario regional office contributed some seed money to get the project off the ground, and dozens of sponsors and local partners are advertising the workshops and encouraging their customers and colleagues to attend.

What accounts for the popularity of wood burning in a high-tech world of computers, cell phones and rockets to Mars? People who use a fireplace just to watch the flames tend to treat wood burning as a casual hobby that enhances a comfortable lifestyle. But families that heat their homes with wood, partly or totally, have a deeper attachment. While cost savings are always mentioned as a factor, most wood burners can give several other reasons for going to all the trouble of cutting and splitting and stacking firewood.

Vanessa Percival, owner of Embers, a stove store in Perth, says do-it-yourself independence and shelter from high energy prices and electrical power failures are also high on the list of motives. "But there are deeper reasons too", she says. "My customers often mention the quality of heat from a stove or fireplace and the intangible satisfaction they get from wood heating — some call it homemade heat."

It might come as a surprise to those who haven't tried it, but a number of skills are involved in successful wood burning, some of which take some practice to get right. Just about everyone who attempts it has had a disastrous experience lighting a wood fire, ending up with a smouldering mess, a smoke filled house, singed fingers, or all three. John Gulland, one of the organizers of the Burn it Smart workshops, agrees that building and maintaining wood fires takes practice. "After twenty five years of heating with wood, I'm still working on my technique," he says.

Even buying decent firewood is a challenge for most of us. How can you tell if the wood is good or if you are getting your money's worth? And once you do make a purchase, how do you respond to your brother-in-law when he insists that he could have got it for half the price?

A key goal of the workshops is to provide advice on how to convert wood smoke into usable heat. Not only do good burning practices increase heat output while reducing wood consumption, they also reduce the risk of chimney fire, and result in less smoke pollution that can poison the air in a community on a cold winter night.

Building good fires, buying good firewood and reducing smoke are just a few of the topics to be discussed at the Burn it Smart workshops. A lot of effort has gone into searching out and refining the workshop's content. A wood heat consultant since 1980, John Gulland says, "We have scoured scientific research reports for ideas and combined that with practical insights from experienced dealers and users." The result, he says, is a series of practical suggestions that people can put to use right away to improve their wood burning experience.

A night out to hear from some of Canada's most experienced wood heat specialists is a great opportunity for people to catch up on the latest news from the world of wood burning. Says Gulland, "I'll bet no one leaves one of these workshops without having learned something new and useful."

Vanessa Percival agrees and adds what she claims is her own selfish reason for promoting the workshops: "The better informed my customers are, the easier my job becomes," she says.

Appendix G. Survey Summaries for Each Workshop

Ottawa - February 10, 2004

75 respondents - 200 participants - 37.5% response

How did you hear about the workshop?	Where	•	u live?	•
48% Newspaper Ad 1% Newspaper story 9% Television or radio ad 7% Phone call inviting me 1% A letter inviting me 7% From a friend or neighbour	28% Suburban 8% Small town 6% Rural farm 19% Rural other Do you use wood fuel for:			
1% Stove/fireplace retailer 26% Other: Algonquin instructor, website, city email, govt website	30% Hea 27% Fire 43% Bot	ting viewing		
What is your main home heating		s your	suppl	ementary heating
fuel? 48% Gas 4% Propane 18% Oil 14% Electric 16% Wood	fuel? 12% Gas Propane 8% Oil 15% Electric 65% Wood			
What prompted you to get more information?	About	how m	nuch w	ood do you burn?
46% Safety concerns 38% Health or environmental concerns 60% Wanted information on efficiency 16% Planning to upgrade my system 32% Want to lower heating costs 32% Firewood purchasing and storage 36% Other: new home ideas	48% less than 1 full cord (4' x 4' x 8') 41% 1 cord to 3 cords 6% 3 cords to 5 cords 5% more than 5 cords			
Do you have an advanced, EPA	How d	o you l	ike the	e workshop?
certified stove or fireplace?	1			
16% Yes 84% No	Great	SoSo	Poor	

If not, what would motivate you to upgrade?

62% Higher efficiency

33% Safer system

31% Air quality concerns

10% Beauty of the fire

14% Other

Great	SoSo	Poor	
87%	13%		Presenters
91%	9%		Handouts
92%	8%		Visual aids
95%	5%		Burn trailer
94%	6%		Location/venue/setting
84%	16%		Answers to questions

Comments from Ottawa

Very informative

Super

Excellent

Reserve all questions for the end so that they can be answered properly.

Very good

Excellent

Excellent

Very good - do it again!

There is an edge to this facilitator. I didn't like it when he cut people off without respect. Otherwise he is very informative.

Well done - most interesting.

I don't know how much I will burn it is my first year with my new Pacific Energy.

Good enthusiasm - lots of info.

Good info

Good info

Excellent info. It should be mandatory before wood heating.

Good info

Would be great to be put on every fall maybe by the fire department and you guys.

Will be installing a stove and chimney at cottage at Carleston Lake.

Great idea. Take it to small rural towns also.

Well done - thank you.

Great - informative

Very informative

Good info

Just starting to build a home in the country. Buying a new woodstove /fireplace.

Should have asked if there were questions.

We supplement the cottage heat - wood - with electricity when necessary. The Vermont Castings stove is very good.

Presenter knowledgeable - answers to questions good and complete.

Excellent

Informative

Very informative

Very useful

Near the end people began to get personal and hijacked presentation. You are an excellent presenter - perhaps ask the know it alls why they attended.

Very informative - thank you.

Very informative - responsive.

Worthwhile - thanks.

Perth - February 11, 2004

210 respondents - 310 participants - 68% response

How did you hear about the workshop?	Where do you live?
workshop:	1% Urban
52% Newspaper Ad	1% Suburban
30% Newspaper story	14% Small town
2% Television or radio ad	15% Rural farm
3% Phone call inviting me	69% Rural other
4% A letter inviting me	
5% From a friend or neighbour	Do you use wood fuel for:
3% Stove/fireplace retailer	60% Heating
1% Other:	Fire viewing
	40% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
6% Gas 5% Propane 18% Oil	1% Gas 5% Propane 21% Oil
20% Electric 51% Wood	33% Electric 40% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	7% less than 1 full cord (4' x 4' x 8')
59% Safety concerns	45% 1 cord to 3 cords
46% Health or environmental concerns	34% 3 cords to 5 cords
69% Wanted information on efficiency	14% more than 5 cords
25% Planning to upgrade my system	
37% Want to lower heating costs	
33% Firewood purchasing and storage	
10% Other: building new home	
Do you have an advanced. EPA	How do you like the workshop?

Do you have an advanced, EPA certified stove or fireplace?

62% Yes 38% No

If not, what would motivate you to upgrade?

73% Higher efficiency

50% Safer system

44% Air quality concerns

11% Beauty of the fire

9% Other

Great	SoSo	Poor	
95%	5%		Presenters
90%	10%		Handouts
91%	9%		Visual aids
93%	5%	2%	Burn trailer
76%	24%		Location/venue/setting
88%	12%		Answers to questions

Comments from Perth

To bad it was at the P.D.C.I.

Need more space for people to view.

Like to learn about better stoking for efficiency.

Good presentation - of interest.

Good job!

Very worthwhile. Good presenter.

Would be great if addressed new home buildings.

Very interesting.

Convinced me to upgrade.

Excellent, useful.

Well presented - well attended

Really useful.

Thanks for the extra seats.

Much needed (and have done this for 35 years).

So far great.

Very good!

Good information

Burn trailer too crowded.

Informative

Learning a lot. Thanks.

Very informative

Re: Questionnaire: Wonder if OK or similar measure/indicator 'good' 'fair' be more appropriate than 'so so' as a mid value (to me so so is almost as negative as poor). Good light hearted yet professional delivery.

Good coverage of an important topic.

Should be run more than one day to accommodate all interested.

Overcrowded

Should be more of them, other heating systems

Intro too long

Tremendously informative

Very informative

Very informative

This seminar is attended by adults - not grade 1V dropouts. Stick to the agenda and speed it up.

Very informative

Pick up pace of intro

Couldn't see burn trailer

Speaker very knowledgeable - Like the humour!

Great speaker

Very useful

Good quality information

Thank you for the help.

More info on central heat

Could not see or hear at burn trailer

Planning to install woodstove as secondary heat source

Very timely - much needed

Excellent information

Very informative

Very good

Great info and great presentation. Disappointed in lack of info/low regard for outdoor boiler furnace.

Very slow start - good info later on.

Worth the drive just to see the outside demonstration

Enjoyable, easy to listen and understand

Impressed, informative

I use a pellet stove Very interesting, informative, well organized Very informative and good points brought out Great Sept 2003 I upgraded to new Pacific Energy wood stove

Brockville - February 12, 2004

71 respondents - 100 participants - 71% response

How did you hear about the	Where do you live?
workshop?	6% Urban
58% Newspaper Ad	4% Suburban
23% Newspaper story	9%Small town
9% Television or radio ad	25% Rural farm
Phone call inviting me	56% Rural other
A letter inviting me	
9% From a friend or neighbour	Do you use wood fuel for:
Stove/fireplace retailer	63% Heating
1% Other: post office	5% Fire viewing
	32% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
8% Gas 4% Propane 32% Oil	Gas 4% Propane 14% Oil
18% Electric 38% Wood	18% Electric 64% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	5% less than 1 full cord (4' x 4' x 8')
44% Safety concerns	33% 1 cord to 3 cords
35% Health or environmental concerns	35% 3 cords to 5 cords
55% Wanted information on efficiency	27% more than 5 cords
34% Planning to upgrade my system	
41% Want to lower heating costs	
38% Firewood purchasing and storage	
11% Other:	
Do you have an advanced FPA	How do you like the workshop?

Do you have an advanced, EPA certified stove or fireplace?

20% Yes 80% No

If not, what would motivate you to upgrade?

56% Higher efficiency 28% Safer system 18% Air quality concerns 10% Beauty of the fire 7% Other

Great	SoSo	Poor	
92%	6%		Presenters
96%	4%		Handouts
96%	4%		Visual aids
70%	30%		Burn trailer
61%	39%		Location/venue/setting
92%	8%		Answers to questions

Comments from Brockville

Good

Great idea - many good points addressed

I didn't know what to expect from the ad. I would call this a lecture/presentation not a workshop. Times lines in the ad would help.

Very good

Burn trailer should be elevated.

Very educational - learned a lot

Educational on subject

Very informative on wood burning stoves. Would like to have more info on fireplace burning of wood.

I will buy EPA eventually.

An excellent presentation! Good info thanks.

Informative

Nice to see an actual stove burning outside. Good information. New ideas to try.

Location freezing - woodstoves should have been inside.

Very informative.

Very good and important

Very good show

Retiring in 2.5 years and will be moving and burning wood then.

Will be burning wood in the future.

Place was too cold.

Workshop too long

Very informative

Would like some more information on burning peat as a fuel.

Very informative

As a cookstove owner for over 25 years and now an advanced stove owner it gave me excellent advice.

Excellent presentation.

Good idea - good info.

Well worth attending - could not see burn trailer.

Excellent

Thank you for taking the time to keep us informed

Excellent

Better view of burn trailer if stoves were mounted or positioned above eye level

Well done, flowed quick and certainly not boring

Kingston - February 16, 2004

74 respondents - 115 participants - 64% response

	<u> </u>
How did you hear about the	Where do you live?
workshop?	28% Urban
69% Newspaper Ad	10% Suburban
1% Newspaper story	10% Small town
13% Television or radio ad	8% Rural farm
1% Phone call inviting me	44% Rural other
A letter inviting me	
12% From a friend or neighbour	Do you use wood fuel for:
Stove/fireplace retailer	46.5% Heating
4% Other: fire dept, internet	7% Fire viewing
	46.5% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
19% Gas 1% Propane 29% Oil	5% Gas 22.5% Propane 16% Oil
19% Electric 32% Wood	22.5% Electric 34% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	24% less than 1 full cord (4' x 4' x 8')
47% Safety concerns	38% 1 cord to 3 cords
27% Health or environmental concerns	33% 3 cords to 5 cords
59% Wanted information on efficiency	5% more than 5 cords
32% Planning to upgrade my system	
32% Want to lower heating costs	
28% Firewood purchasing and storage	
14% Other:	

Do you have an advanced, EPA certified stove or fireplace?

28% Yes 72% No

If not, what would motivate you to upgrade?

50% Higher efficiency

28% Safer system

19% Air quality concerns

8% Beauty of the fire

7% Other

Great	SoSo	Poor	
90%	8%	2%	Presenters
95%	3%	2%	Handouts
95%	5%		Visual aids
90%	9%	1%	Burn trailer
90%	10%		Location/venue/setting
92%	8%		Answers to questions

Comments from Kingston

Interesting information

Very informative

Many publications are redundant and over glossy. Canada publications seems good.

Thank you.

Have been heating year round with and EPA woodstove for 12 years. Looking at what is available for a new building.

Good to hear this discussed. At our cottage our 'see fire' stove is the heat mid winter visits and all - it is super. We have many friends who rely on woodstoves to save money on heating - we'll let them know about the Guide to Residential Heating book.

Great ideas

Very well explained and helpful

I appreciated the information on indoor vs. outdoor chimneys.

Very interesting and informing.

Okay.

A bit slow for first half.

I'm really glad I came to this. Very much appreciated.

Great info for new stove purchaser. Thanks.

We are contemplating building a fireplace for both appearance but to supplement our oil furnace heating system (forced air).

You are very biased about outdoor furnace. We have been in the heater business for 35 years. There are low emission furnaces (ULC and CSA) such as Heatmore. You cannot tar all furnaces with the same slash sp. Nice simple powerpoint - well done. Good easy to understand explanations of fires and smoke.

Demonstration was effective and the demonstrator - Brad - very personable - good ambassador. I live in renovated rural farmhouse that used to have wood heating as a primary source of heat. We are considering supplementary heating options presently.

Good, a bit slow.

Well done. 1st time I have seen such.

Excellent - very informative

Need more lighting to read handouts

Excellent and informative

We are learning lots - thank you!

Very interesting and thought provoking

Waiting until break for answers to firewood - speaker was clear

Belleville - February 17, 2004

67 respondents - 230 participants - 29% response

How did you hear about the	Where do you live?
workshop?	9% Urban
48% Newspaper Ad	2% Suburban
31% Newspaper story	4% Small town
5% Television or radio ad	25% Rural farm
Phone call inviting me	60% Rural other
1% A letter inviting me	
7% From a friend or neighbour	Do you use wood fuel for:
1% Stove/fireplace retailer	64% Heating
7% Other:	8% Fire viewing
	27% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
12% Gas 9% Propane 21% Oil	3.5% Gas 3.5% Propane 16% Oil
23% Electric 35% Wood	33% Electric 44% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	15% less than 1 full cord (4' x 4' x 8')
84% Safety concerns	37% 1 cord to 3 cords
45% Health or environmental concerns	35% 3 cords to 5 cords
36% Wanted information on efficiency	13% more than 5 cords
30% Planning to upgrade my system	
30% Want to lower heating costs	
34% Firewood purchasing and storage	
4% Firewood purchasing and storage 7% Other:	Have do you like the weeks and

Do you have an advanced, EPA certified stove or fireplace?

46% Yes 54% No

If not, what would motivate you to upgrade?

84% Higher efficiency

45% Safer system

36% Air quality concerns

12% Beauty of the fire

6% Other

Great	SoSo	Poor	
90%	8%	2%	Presenters
96%	4%		Handouts
93%	7%		Visual aids
55%	43%	1%	Burn trailer
93%	7%		Location/venue/setting
91%	9%		Answers to questions

Comments from Belleville

Need more complete explanations and group presentation

Don't Need it until I Move back to the country

It's about time we had some answers! Both environmentally and efficiency.

Enjoyed the presentation. Would be interested in learning more about the catalytic type of stove.

Well worth it - thank you.

Excellent!!

Very good.

Very informative.

Instructor to slow and repetitive.

Wood burn trailer higher so people at back of crowd can see.

Good workshop.

Good

Well done

Very informative - good presentation.

Well worth attending.

Beneficial to update info on wood burning.

Very informative.

Very informative for the general public.

Very informative.

Very informative.

What is WETT?

Excellent presentation - well informed.

Break too long.

A great forum for the consumer.

Great info.

Learned new info - thanks.

Cobourg/Cold Springs - February 18, 2004

35 respondents - 60 participants - 58% response

oo respondents to participants to 70	
How did you hear about the	Where do you live?
workshop?	20/ 11 1
•	3% Urban
62% Newspaper Ad	Suburban
6% Newspaper story	8% Small town
Television or radio ad	29% Rural farm
2% Phone call inviting me	60% Rural other
A letter inviting me	
9% From a friend or neighbour	Do you use wood fuel for:
3% Stove/fireplace retailer	63% Heating
18% Other: township office, website	6% Fire viewing
	31% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
9% Gas 3% Propane 22% Oil	4% Gas Propane 11% Oil
25% Electric 41% Wood	35% Electric 50% Wood
What prompted you to get more	About how much wood do you burn?
information?	_
	13% less than 1 full cord (4' x 4' x 8')
23% Safety concerns	58% 1 cord to 3 cords
34% Health or environmental concerns	13% 3 cords to 5 cords
77% Wanted information on efficiency	16% more than 5 cords
20% Planning to upgrade my system	
28% Want to lower heating costs	
14% Firewood purchasing and storage	
8.5% Other:	

Do you have an advanced, EPA certified stove or fireplace?

33% Yes 67% No

If not, what would motivate you to upgrade?

90% Higher efficiency 35% Safer system 30% Air quality concerns Beauty of the fire Other

Great	SoSo	Poor	
96%	4%		Presenters
88%	12%		Handouts
90%	10%		Visual aids
78%	22%		Burn trailer
75%	25%		Location/venue/setting
91%	9%		Answers to questions

Comments from Cobourg

Very informative, nicely done. Lecturer knows his stuff!

Glad I came

Time well spent

Informative

Better lighting on woodburning area

Good presentation - technical in laymen language

Very good idea, to help us to improve air quality. Long overdue. The unfortunate part is that those who did not attend are the worst polluters.

Great idea - should be promoted more.

Well done - I hour to get here - hopefully the seminar will be held further west so we can encourage friends neighbours to attend.

Great information!

Peterborough - February 19, 2004

43 respondents - 96 participants - 47% response

	'
How did you hear about the	Where do you live?
workshop?	21% Urban
58% Newspaper Ad	Suburban
8% Newspaper story	16% Small town
Television or radio ad	16% Rural farm
Phone call inviting me	47% Rural other
4% A letter inviting me	
10% From a friend or neighbour	Do you use wood fuel for:
10% Stove/fireplace retailer	46% Heating
10% Other:	11% Fire viewing
	43% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
16% Gas 2% Propane 20% Oil	11% Gas Propane 19% Oil
23% Electric 39% Wood	28% Electric 42% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	13% less than 1 full cord (4' x 4' x 8')
53% Safety concerns	46% 1 cord to 3 cords
44% Health or environmental concerns	30% 3 cords to 5 cords
65% Wanted information on efficiency	11% more than 5 cords
19% Planning to upgrade my system	
37% Want to lower heating costs	
40% Firewood purchasing and storage	
19% Other:	

Do you have an advanced, EPA certified stove or fireplace?

37% Yes 63% No

If not, what would motivate you to upgrade?

99% Higher efficiency

67% Safer system

42% Air quality concerns

17% Beauty of the fire

12% Other

Great	SoSo	Poor	
92%	8%		Presenters
92%	6%	2%	Handouts
90%	8%	2%	Visual aids
97%	3%		Burn trailer
90%	10%		Location/venue/setting
94%	6%		Answers to questions

Comments from Peterborough

More people need to be educated on safe woodburning.

Very informative

Seriously considering upgrading from a baffled stove to an EPA certified unit to burn cleaner and more efficiently because of workshop.

Member of CAP - Clean Air Peterborough. Great to have speaker repeat questions from crowd. Also forwarding info to son with new house in B.C. and friend nearby who is only using a firebox.

Excellent - answered all my concerns.

Very informative

Informative

Excellent presentation - I learned a lot.

Handouts to repetitive.

Appreciate the chance to renew or receive current woodburning input.

Very informative

Very informative

Very good speaker on stoves (everything)

Good

Excellent

Too verbose! The presentation informed as well as impacted facts we already know but tend to ignore.

Pembroke - February 23, 2004

51 respondents - 105 participants - 49.5% response

	<u>'</u>
How did you hear about the	Where do you live?
workshop?	8% Urban
77% Newspaper Ad	8% Suburban
Newspaper story	27% Small town
Television or radio ad	2% Rural farm
Phone call inviting me	55% Rural other
A letter inviting me	
17% From a friend or neighbour	Do you use wood fuel for:
2% Stove/fireplace retailer	67% Heating
4% Other:	Fire viewing
	33% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
8% Gas Propane 19% Oil	2% Gas 4% Propane 22% Oil
16% Electric 57% Wood	30% Electric 42% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	12% less than 1 full cord (4' x 4' x 8')
46% Safety concerns	35% 1 cord to 3 cords
33% Health or environmental concerns	41% 3 cords to 5 cords
54% Wanted information on efficiency	12% more than 5 cords
21% Planning to upgrade my system	
31% Want to lower heating costs	
33% Firewood purchasing and storage	
6% Other:	

Do you have an advanced, EPA certified stove or fireplace?

32% Yes 68% No

If not, what would motivate you to upgrade?

60% Higher efficiency

28% Safer system

26% Air quality concerns

14% Beauty of the fire

2% Other

Great	SoSo	Poor	
89%	11%		Presenters
90%	10%		Handouts
90%	10%		Visual aids
88%	12%		Burn trailer
90%	10%		Location/venue/setting
76%	24%		Answers to questions

Comments from Pembroke

We're not little children - we don't need constant repeating of simple facts.

We didn't learn anything new - guess we are up to date. Presenter tended to repeat himself often.

Very informative.

Very visual - that's good.

Some new ideas and products

Good idea

The best presentation I have attended in years!!

I'm learning about woodburning. Thanks for the help.

I learnt more [here] than my past 10 years of wood burning.

Good tips.

Excellent workshop, nicely presented.

Good

Very informative. I've learned a lot of necessary information that will certainly be beneficial in our woodburning

Very good. Well presented. Learned a lot.

Very informative

Very informative

Very good - thank you

Much appreciated info to help heat with less pollution and more efficiency. With possible power outages a wood stove is essential for emergency heat.

Very informative.

Very interesting - thank you.

Excellent advice on wood burning

Opportunity to obtain overheads used in the presentation in a condensed form would be great - web site will do for now. Keep up the service. Well done.

Interesting - well presented.

Hawkesbury - February 24, 2004

51 respondents - 98 participants - 52% response

How did you hear about the workshop?	Where do you live? 4% Urban
74% Newspaper Ad	8% Suburban
14% Newspaper story	27% Small town
2% Television or radio ad	16% Rural farm
Phone call inviting me	45% Rural other
A letter inviting me	
5% From a friend or neighbour	Do you use wood fuel for:
Stove/fireplace retailer	50% Heating
5% Other:	4% Fire viewing
	46% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
7% Gas 5% Propane 13% Oil	9% Gas 2% Propane 13% Oil
21% Electric 54% Wood	38% Electric 38% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	9% less than 1 full cord (4' x 4' x 8')
61% Safety concerns	28% 1 cord to 3 cords
59% Health or environmental concerns	30% 3 cords to 5 cords
63% Wanted information on efficiency	33% more than 5 cords
31% Planning to upgrade my system	
41% Want to lower heating costs 29% Firewood purchasing and storage	
2% Other:	
Do you have an advanced, EPA	How do you like the workshop?
•	How do you like the workshop!
certified stove or fireplace?	

54% Yes 46% No

If not, what would motivate you to upgrade?

100% Higher efficiency

50% Safer system

50% Air quality concerns

9% Beauty of the fire

9% Other

Great	SoSo	Poor	
98%	2%		Presenters
100%			Handouts
95%	5%		Visual aids
90%	10%		Burn trailer
100%			Location/venue/setting
97%	3%		Answers to questions

Comments from Hawkesbury

So - so. I have burned wood for 50 years (Note: in rating of workshop, this person said everything was great). More people should see and hear this.

Great

Much better after break - a bit to elementary before break.

Perfect.

Essential presentation

Very interesting

At the moment I only use stove for power failures or really cold nights. I like handouts on each apparatus specifically on fireplace inserts.

Top notch! Very lively - kept entire room listening.

Very informative. Interested in hearing more on firewood in we cut our own and have limited hardwood supply.

Very good presentation, very lively and informative.

More models would make burn trailer great.

Interesting and informative for certified stove EPA.

Great evening. Keep up the good work.

Very informative, well worth the time.

Fantastic. This is a must for people considering woodburning.

Cornwall - February 25, 2004

29 respondents - 110 participants - 26% response

How did you hear about the	Where do you live?
workshop?	21% Urban
44% Newspaper Ad	Suburban
28% Newspaper story	17% Small town
6% Television or radio ad	28% Rural farm
Phone call inviting me	34% Rural other
A letter inviting me	
6% From a friend or neighbour	Do you use wood fuel for:
16% Stove/fireplace retailer	59% Heating
Other:	Fire viewing
	41% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
17% Gas 3% Propane 14% Oil	5% Gas 5% Propane 10% Oil
24% Electric 42% Wood	40% Electric 40% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	5% less than 1 full cord (4' x 4' x 8')
45% Safety concerns	14% 1 cord to 3 cords
45% Health or environmental concerns	38% 3 cords to 5 cords
76% Wanted information on efficiency	43% more than 5 cords
14% Planning to upgrade my system	
58% Want to lower heating costs	
38% Firewood purchasing and storage	
14% Other:	

Do you have an advanced, EPA certified stove or fireplace?

37% Yes 63% No

If not, what would motivate you to upgrade?

41% Higher efficiency

27% Safer system

17% Air quality concerns

17% Beauty of the fire

14% Other

Great	SoSo	Poor	
90%	5%	5%	Presenters
92%	8%		Handouts
96%	4%		Visual aids
81%	15%	4%	Burn trailer
88%	15%	4%	Location/venue/setting
96%	4%		Answers to questions

Comments from Cornwall

Informal - non bias

Very informative and helpful. Thanks for the toque.

Very important information - overdue.

Excellent workshop. I've seen corn burning furnaces on the internet and would like more info on these if you have some.

Very informative

Very good speaker

Very informative

The presentation was done in a manner that is both professional and very understandable to a lay person such as myself.

Excellent workshop. Thank you.

South Mountain - February 26, 2004

22 respondents - 65 participants - 34% response

How did you hear about the	Where do you live?
workshop?	Urban
48% Newspaper Ad	Suburban
8% Newspaper story	18% Small town
Television or radio ad	27% Rural farm
Phone call inviting me	55% Rural other
8% A letter inviting me	
12% From a friend or neighbour	Do you use wood fuel for:
16% Stove/fireplace retailer	83% Heating
8% Other:	4% Fire viewing
	13% Both
What is your main home heating	What is your supplementary heating
fuel?	fuel?
4% Gas 8% Propane 36% Oil	Gas Propane 30% Oil
13% Electric 39% Wood	15% Electric 55% Wood
What prompted you to get more	About how much wood do you burn?
information?	
	4% less than 1 full cord (4' x 4' x 8')
23% Safety concerns	24% 1 cord to 3 cords
27% Health or environmental concerns	43% 3 cords to 5 cords
77% Wanted information on efficiency	29% more than 5 cords
36% Planning to upgrade my system	
36% Want to lower heating costs	
14% Firewood purchasing and storage	
Other:	
Do you have an advanced, EPA	How do you like the workshop?

certified stove or fireplace?

45% Yes 55% No

If not, what would motivate you to upgrade?

55% Higher efficiency

4% Safer system

14% Air quality concerns

4% Beauty of the fire

4% Other

Great	SoSo	Poor	
94%	6%		Presenters
94%	6%		Handouts
89%	11%		Visual aids
100%			Burn trailer
100%			Location/venue/setting
80%	20%		Answers to questions

Comments from South Mountain

Very helpful - informative well presented - aid to decision making. Appreciated

Excellent

Good

Very informative and useful

Very informative - a little slow at times - hard chairs - butt asleep.

Good comments on the 6 easy steps.