



NEW HORIZONS

NATIONAL NEWSLETTER



**HOW INNOVATION IN
AGRICULTURE CAN
PROTECT BIODIVERSITY**

p. 12

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ABOUT THE CAAA

The primary objective of the CAAA is to promote safety and professionalism amongst its participating members. The CAAA works with federal and provincial government agencies to design policies that are fair and equitable and, above all, that protect both rural customers and urban dwellers. The CAAA advises regulatory agencies on matters pertaining to the safe and efficient aerial application of pesticides and other crop inputs.

CAAA AND THE ENVIRONMENT

Each of our members believes in environmental safety. They know their business relies on a healthy and sustainable environment. Our members work hard at protecting the environment and have a healthy respect for nature.

CAAA AND SAFETY

Transport Canada, Agriculture Canada, Health Canada, Environment Canada and their provincial and municipal counterparts are only a few of the government departments which the CAAA works with to ensure safe application of pesticides and other products.

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Canadian Aerial Applicators Association;
202, 5405 99 St. NW, Edmonton, AB T6E 3N8;
T (780) 413-0078 | F (780) 413-0076

info@canadianaerialapplicators.com
www.canadianaerialapplicators.com

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CANADIAN AERIAL
APPLICATORS ASSOCIATION

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FEBRUARY 20 - 22

VICTORIA, BC

#CAAA2020

The Canadian Aerial Applicators Association 34th Annual General Meeting, Conference & Trade Show is set to take place at the Fairmont Empress in Victoria, BC. Take part in educational speaker sessions, visit 30+ vendors at our trade show, and enjoy the banquet and auction with industry members.

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PRESIDENT'S REPORT



DARREN TIEDE
PRESIDENT, CAAA

At this writing, forest protection programs are in full swing, the prairies are receiving much needed rain and commodity prices are up off their lows, so things are looking up, and I am sure everyone is looking forward with anticipation of a busy season. Fingers crossed.

Your board of directors have been busy lately.

Among our projects were organizing a CAAA booth at the COPA Convention which was held in Innisfail, AB. Thanks to the Lazenby's for providing a 502 for display and to our member volunteers and Shara for manning the display. Positive feedback regarding getting our message out to aspiring pilots as well as networking with COPA officials as to our shared goals made it a great opportunity for us. We have a great ally in COPA and will continue to grow our relationship.

Shara will be attending a Mancozeb task force meeting in Ottawa to represent our interests. We are fortunate to have a seat at the table and the

board felt the expense of being there is worth it. At issue is mancozeb registration, but if it were re-registered without an aerial label that would put us at a considerable disadvantage.

Our finance and sustainability committee have been analyzing current trends affecting the CAAA's short- and long-term sustainability. Agriculture in general has seen a steady trend of mergers and acquisitions and retirement and our industry is no exception. This will be a topic receiving close scrutiny over the summer with recommendations for board consideration in Ottawa this October.

If you haven't noticed yet there is a 'find an applicator' section on our website which will make it easier for those seeking our services to find a CAAA member.

Finally, our attempts to streamline temporary foreign worker rules seem to be falling on deaf ears so we are going to try a different strategy to plead our case, hopefully with better results than we have achieved so far.

Stay Safe!

EXECUTIVE DIRECTOR REPORT

Welcome to the 2019 spray season! As the spray season kicks off your CAAA Board remains active as we continue to work on a few key areas within the Association.

We recognize that sustainability, not only for the Association, but the industry as a whole, is becoming more and more of a going concern. CAAA has engaged a Sustainability Committee that is working to gain exposure for the Association and create positive energy around aerial agriculture with a focus on attracting pilots. In the past few months the CAAA had representation at the MAC Aviation Career Fair in Manitoba as well as the COPA Convention in Alberta. Both events were extremely positive for the industry and the CAAA with attendees showing a genuine interest in agricultural aviation. Thank you to all members that worked the booths representing their provincial associations and the CAAA.

A response was finally received regarding our request to the TFW Program. The response was not what we were hoping for but can be used as a stepping stone moving forward as we work to change how aerial application is classified within the Program. The door has been opened and we

will continue to communicate with the agency and hopefully, with the engagement of provincial governments, eventually realize an outcome that is satisfactory for those dependent on the program. The TFW Program is now aware of the importance, and dependency, our industry has on the program and we will continue to foster our conservations with the TFW Program.

The CAAA office remains busy as preparations are underway for the Victoria 2020 conference. We are also working to coordinate the CAAA Board meeting and government meetings held in Ottawa in October. These meetings are critical to the Association as the Board has the opportunity to meet with different government agencies such as Transport Canada, PMRA and Agriculture and Agri-Food Canada.

As always, please do not hesitate to contact me with any inquiry or if you have suggestions that would benefit the Association.

Wishing you and your family all the best. Fly smart and have a safe 2019 spray season.

P.S. Join me in congratulating Tamara (and Steve) on the birth of their beautiful baby boy, Parker Gordon Hudson. Born May 14th, 2019. We wish Tamara all the best as she celebrates motherhood.



SHARA TARDIF
EXECUTIVE DIRECTOR,
CAAA

PROVINCIAL REPORTS

SASKATCHEWAN REPORT

The SAAA Single Engine Air Tanker Program was needed early this spring and responded to several calls starting in April. Several Operators have obtained fire gates to comply with Transport Canada. Some out of Province Operators have requested to participate in the program however Operators in the province will be given priority. If they are unable to respond, out of province Operators will be called by dispatch. The implementation of the SEAT Program is most welcome with the extreme fire conditions that we have experienced this year.

SAAA members should have received a package in the mail explaining the update to our Bylaws for members to review before the annual meeting in the fall. The board has put a lot of work into the bylaw update which was needed to comply with regulations and allow us to serve the members properly and give us guidance. The Board has also updated the SAAA Code of Conduct which directors are required to sign when they are elected to the board. Please review the package carefully and be prepared to vote on the changes at the annual meeting.

I would like to congratulate Chad Vanderbyl on being elected as the next Vice President of the CAAA. I trust that he will serve the members well as he has been doing already. This opened another position on the CAAA board from Saskatchewan. Tanner Denesowych was appointed at our board meeting in April to fill this position until the members can ratify this at our annual meeting. We have had the President and Vice President filling these positions. Tanner is willing to serve as the next Vice President when my term as President is up in the fall and Chad will become the SAAA President. My position on the CAAA board is given to the new Vice President when the terms of President and Vice President expire. So, the members will ratify Tanners position on the CAAA board if he is elected as the new Vice President.

The members will then select the person for the additional position on the CAAA board. I would suggest that when we need a third representative on the CAAA board that the Past President be next to approach.

I am in Quebec on the Spruce Bud Worm program as I write this report as are many of our members. Our fleet is somewhat depleted in June as the Forestry program in Quebec is expanding into Ontario and we are called to provide our services. This has encouraged many operators to expand their fleets to keep up with the demand across the country. It is good for our industry to see all these new aircraft arriving each year.

Remember to keep safety first especially when we get busy.



TED ANDERSON
PRESIDENT, SAAA

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ALBERTA REPORT



TOM KINNIBURGH
PRESIDENT, AAAA

Well here we go on the Alberta Front where the dust is blowing, and the water isn't flowing. Though some may say it is dry, I would have to say it is very dry. However, that could all change in a couple of days if the forecasted rains and showers hit this bald, dry prairie soil. So, on that, only time will tell and only Mother Nature can control. Nevertheless, most things here in Alberta have been running smooth. Since the Provincial election, the price of gas has come down somewhat to the point that I can finally afford to put a full tank of gas in my truck.

Recently, Alberta has been working on one main project: Setting up a booth with COPA at their annual convention in Innisfail, AB. COPA members' attendance was great. It was amazing how the general public had no idea that aerial application existed even though these people were pilots. We would like to thank Jared and Jason Lazenby from Royco Air Service for bringing a plane there for display and all the volunteers for helping at

the event. Also, a huge thanks to Corey and Hope from Wetaskiwin Aerial for organizing this event. Without support like this from the members we would remain in the shadows of the public eye.

This is proof that we should not only promote aerial application at grower and farmer events, but we also need to promote it at public events to get the proactive word out there about our industry. This could prevent a lot of misconceptions about our industry and educate the general public about the industry we love to be involved in.

In closing, I would like to take a moment to say thank you to everyone for your support after my wife Brenda's passing this May. It is when this happens that a person reflects back on the past to the good times and the great times. So, I would like to remind everybody to make great memories with your family, friends, and coworkers, and remember we are only here for a short time, so take advantage of it and enjoy every moment.

Fly safe, Tom.



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(Below) Jon Bagley presents CAAA Scholarship at 2019 CAAA Awards Luncheon at Hotel Bonaventure, Montreal, QC on February 22, 2019. Source: ManageWise, Inc.



CAIR REPORT

JON BAGLEY, CHAIRMAN, CAIR

Hopefully, by the time you are reading this article, your spraying season has safely started and will be a successful one. This is the first of a new series of articles to appear in the CAAA Newsletter dedicated to the topics of CAIR, insurance issues and pilot safety.

CAIR is over 25 years old! That is a success and a testament to the ingenuity and determination of a relatively small sector of the aviation industry in Canada ... aerial application. The CAAA started working on the concept of CAIR when I was president of the CAAA. That's a bit scary to me since that means it has also been 25 years since I had the honor of leading our industry association. It was an exciting time with many new changes taking place in a very short period of time ... Ops Manuals, MCMs, self-insurance, the loss of silent labels, the drive to become respected by our regulators and the list goes on. Interestingly, many of those same issues and challenges face us today ... decades later.

Operating CAIR has taught us many things during its lifetime. One important point that we learned during this time is what it actually costs us to provide hull insurance to our subscribers. Many of our founding board members have retired in the last few years. Their contributions have been invaluable in getting us to this stage of maturity

in the insurance business. We miss those board members and their experience, but their departure has allowed us to bring in some new board members with a fresh perspective on how to operate our reciprocal.

Many things have changed since CAIR's inception. First, domestic insurance rates have been historically and artificially low for the last few years. When CAIR started, the 6% rate that we extended to our members was a bargain compared to the domestic rate at the time, so it was no wonder that we had almost cornered the aerial application hull insurance market in Canada. Second, many of the newer, younger operators and pilots in Canada now ... don't remember when CAIR started and maybe don't even know what CAIR is, why we started it or how it works.

When CAIR started, the industry insurance rates were much higher, so we arbitrarily set a rate that was better than the industry but gave us the cash we needed to operate while we got our feet firmly planted under us. Now after 25 years of good, bad and average years we have a very good indication what it costs our subscribers for insurance. Of course, there are no guarantees in the insurance business, but on average we know what rates we need to operate and survive in the insurance business. CAIR has also spent its life fine tuning the checks and balances that re-

insurance provides to our fund even more security for its members. You can think of the reinsurance as insurance on our insurance! In our lifetime of operation, we have only used the reinsurance policies that we keep in place one time and then it was not needed to survive, it was just a good business decision.

Over the last two years we have been tackling some difficult issues. How do we attract as many safe conscientious operators and pilots as possible in a time when the domestic insurance market in Canada is lower than anywhere else in the world? This artificially low insurance market in just our sector of insurance in Canada has lured many of our previous subscribers away with slightly lower rates in the short term. To remain competitive CAIR has tried to be close to these rates. This has made us change our strategy going forward. With less cash from premiums being held in the fund we have gone from holding our subscribers' rebates and then giving them back at a later date ... to taking less money from our subscribers up front and returning less in the form of a rebate. Although this makes cash flow in CAIR more critical, it really does not change the stability of CAIR and how it operates. We are simply letting you keep your money now instead of getting it back sometime in the future.

So, the question becomes ... is CAIR an insurance

company or not? Well let's look at how we view an insurance company. We pay insurance premiums to an insurance company that we will never get back. We don't try to have claims with our insurance company, but if we do have a claim, we feel like we paid our premium so just pay me out and let me move on. In contrast, how should CAIR subscribers view things? We pay premiums into a fund that will protect me if I have an accident. If I have a great year, I will get a significant portion of my premium returned to me. We are all in this together, so it is important to me to make sure that I am safe not only for the sake of our own pilots and business, but also for the prosperity of the fund and our industry. This simple change of mindset and strategy in CAIR not only improves us as pilots and operators, it also brings a good light on our entire industry. It shows that we are not individuals out there doing our own thing, we are part of a national group with common interests and goals, one of them being aviation safety. At the end of the day I think we all realize that safety is a mentality that we need to develop, and accidents are just that ... unfortunate accidents. It is our goal at CAIR to help foster a healthy attitude toward operating our aircraft and mentoring new pilots so that they can also be safe for many years to come.

So, there is a different attitude and responsibility for the members of CAIR as opposed to the

company that purchases insurance from the domestic market. CAIR is unique in the whole world. There has been no other fund set up like this that has been as great a success and changed the insurance rates in an entire country. If you are a member of CAIR, pat yourself on the back for providing the rest of the operators in Canada with the lowest hull insurance in the world.

If you want to be a member of CAIR you should look at it as a long-term strategy just like investments. If you were investing money it is not a good idea to pop in and out of investments trying to chase the market. In the same way, for CAIR to be successful it is important for our members to be committed to the concept of CAIR and stick it out. In other words, if you do have an unfortunate event with an aircraft, stick with the fund ... don't just leave the rest of the members to deal with the cost of the loss. I know many people have said that they are paying for other members accidents. Well I guess we are all in it as a group and that is true. But don't be misled by this simple truth. The fact is that when you buy insurance from the domestic market you are also paying for the accidents of others in your premiums. You are simply part of a worldwide pool. So, when there is an airliner accident or some other world event it can impact the general aviation insurance rates going forward. CAIR is simply focused on a very narrow segment of the aviation insurance market

- Canadian Aerial Applicators.

Soon we will be making further changes to the way CAIR operates so that it is simpler and more straightforward. If you are interested, keep in mind that we are not the local insurance company, we are the long-term alternative that will insure you have competitive premiums for the life of your business. We are looking for new members who have a great safety record and make safe operations part of their business culture. Anyone interested in more information should contact CAIR to explore the possibilities. There is strength and security in numbers.

Just one final piece of interesting information to help put things in perspective. Since inception CAIR has taken in about \$50 million in premiums and returned about \$28 million in rebates because of safe operations ... over half! What other insurance policy that you have can claim that? It's all thanks to the safe operations conducted in our industry.

We will continue with this newsletter spot in the future. To make it interesting, if you have any specific questions or topics you would like discussed please email them to me and I will have the appropriate person address them.

CAIR CONTACT INFORMATION

Keep the following information handy in your CAIR file to assist you during the 2019 spraying season. The 2019 CAIR Safety Seminar was held in Montreal, QC in conjunction with the CAAA Annual Conference and Trade Show.

The seminar was recorded and is now available on the CAAA Website Members Only Page for any pilots who were unable to attend the seminar. If you have any questions, please contact the CAIR Office at 780-413-0016. **CAIR inquiries should be directed as follows:**

For questions regarding CAIR safety seminar, CAIR videos, meeting information or general inquiries contact:

CAIR
P.O. Box 21085
Edmonton, AB T6R 2V4

Phone: 780-413-0016
Fax: 780-413-0076
Email: info@canadianaerialapplicators.com

For questions regarding insurance coverage, applications and claims contact:

George Esau, Pina Guenette
Oldfield Kirby Esau, Inc.
P.O. Box 699
Winnipeg, MB R3C 2L2

Phone: 204-943-1441
Fax: 204-957-5561
Email: gpesau@oldfieldkirby.com
pguenette@oldfieldkirby.com

For questions regarding financial statements, taxes and payments contact:

Jim Peters
1002 Warsaw Avenue
Winnipeg, MB R3M 1E4

Phone: 204-477-4770
Fax: 204-477-4770
Email: jimpeters@shaw.ca



(Above) Jaylicia, Evander, and Levi Wiens family photo, Arborg, MB, 2018

SPOTLIGHT – LEVI WIENS

LEVI WIENS, PILOT, JONAIR (1988) LTD

I was born and raised in Santa Cruz, Bolivia on my dad's grain farm. I was a true farm boy, working on the farm early in the morning before school and after school again. My dad would hire aerial applicators to spray his crops. They did not have GPS guidance and required people to flag at the end of the fields. So, I'd get up at 5 a.m. to flag for the pilot before I went off to school.

I was eight or nine years old when I started plowing fields without supervision and hauling grain carts during harvest for both my dad and late grandpa. Nothing made me prouder than operating farm equipment. I was always so excited to see the planes flying around the area, spraying crops. In my free time I used to carve model airplanes out of wood and make kites. I never dreamt of making flying a career. I thought I was destined to be a farmer like many generations of my family before me.

I was 14 when my parents decided to move to Canada. The culture shock of the move made attending school very difficult for me. With the counsel of my parents, I chose to start a full-time job at age 16 and did homeschooling at night. I did a variety of different jobs, such as welding, CNC machining, heavy equipment operating etc.

At the age of 18, I met a friend who was going into the airline industry. I started asking him questions, and I got interested in flying. I decided to start training for my private pilot license. Then I found out one of my second cousins (Walter Dyck) was training to be an AG pilot. I got in contact with him and asked him about the process. It seemed so much more exciting to fly an AG plane, so I chose to steer in that direction. I got in touch with Dave Frisch at Jonair through Walter and applied for a job to be on the ground/loading crew.

The summer of 2013 was my first year at Jonair. I worked on the ground for two summers and did flight training during the winters. In the spring of 2015, I went to Battlefords Airspray to take the AG flying course that Fran de Kock and his colleagues do every year. I started flying the C188 AgTruck at Jonair following the completion of the course. In November of that year I got married to my beautiful wife Jaylicia. In 2018 I started flying an Air Tractor 502B. Jaylicia was pregnant at the time with our first child. On May 28, 2018 I was supposed to be flying in the morning. My alarm went off at 4:45 that morning and I jumped into my pants and got ready to have a quick bite before going to work, when my wife said, "You probably shouldn't go to work today". Excited to go flying and not thinking of anything else, I asked, "Why not? I told Dave I

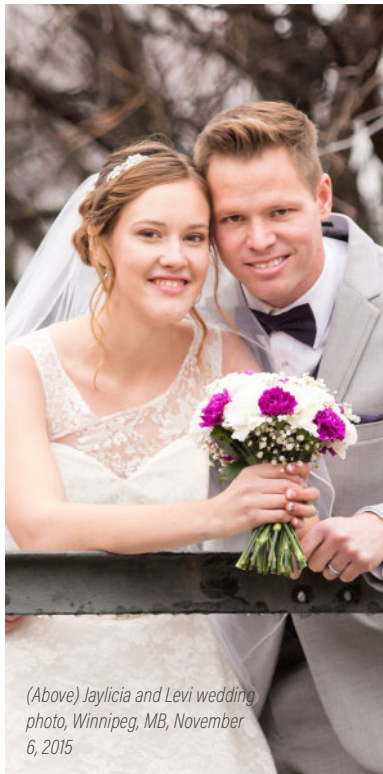
(Below) Family picture, Arborg, MB, December 29, 2019



would be there at 5:15." She said, "I've been having contractions for the last two hours." Things got intense and sped up quickly after that. I texted Dave that I couldn't make it and was rushing to the hospital. About 5 hours later our son, Evander, was born. Having a newborn in a camper trailer during spray season was easier to manage than we had expected, and I had a successful first year in the 502.

This is my fifth year flying at Jonair. Dave is an excellent mentor to me in the flying department as his priority is always to keep me safe and make sure that I have what it takes to do well in the AG industry. Earlier this year I had the fun opportunity to ferry a new AT502 XP from the factory in Olney, TX to Manitoba.

I dream of one day scratching my entrepreneurial itch and starting my own business. I thank Dave for giving me the opportunity to work at a great organization like Jonair, my parents for always being my fan base and supporting all my endeavors, and my wife for supporting me by making sure my dreams stay alive. Last but not least, I thank God for blessing me with an exciting career and keeping me safe.



(Above) Jaylicia and Levi wedding photo, Winnipeg, MB, November 6, 2015



(Above) Levi with younger brother Benny with soy bean crop, 2003



(Above) Young Levi Wiens, 1994



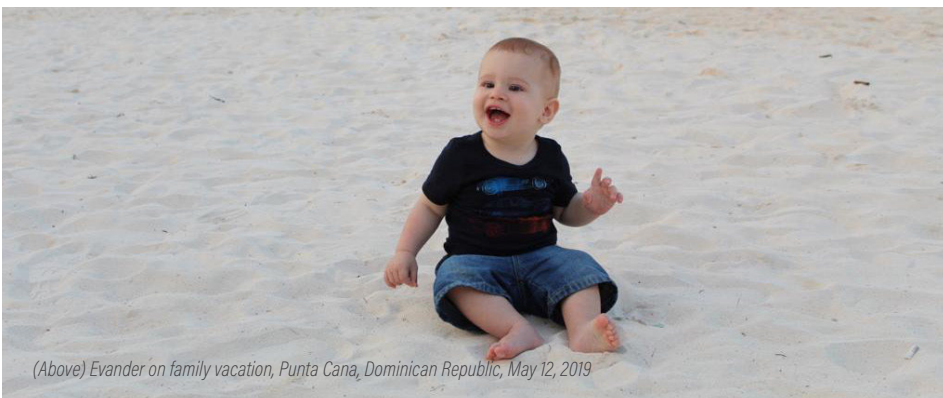
(Above) Levi with Evander and 502 at Jonair, June 2018



(Below) Levi with Evander in 502 at Jonair, June 2018



(Below) Family vacation, Punta Cana, Dominican Republic, May 12, 2019



(Above) Evander on family vacation, Punta Cana, Dominican Republic, May 12, 2019



(Above) Two different cultures, wheat and sunflowers. Source: loaBal, Adobe Stock

HOW INNOVATION IN AGRICULTURE CAN HELP PROTECT BIODIVERSITY

PIERRE PETELLE, PRESIDENT AND CEO, CROPLIFE CANADA

A new report published by the United Nations Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services has garnered significant attention recently, as it should. According to the report we are losing biodiversity around the world at an alarming rate. This is an issue that we must tackle collectively – as countries, industries and societies around the world.

As the report notes, there are a wide range of factors that impact biodiversity, including climate change, disease, urbanization, deforestation, mining and agriculture. And as such, there is no one single solution to the problem. Protecting our planet's biodiversity is in all of our best interests and it will take a collective commitment that leverages science and innovation across every sector of the economy.

There is no question that agriculture has a

significant impact on biodiversity. But as the industry that grows food, which is critical to human existence, it is important that we find ways to continue to produce food that limits any negative impacts on biodiversity.

And we have made significant progress on this front. Agriculture has become more sustainable than it's ever been before. We can now grow more crop per acre of land than at any other time in history. Growing more on existing land means we can leave wildlife habitats untouched.

In Canada, we have embraced agricultural innovation to help drive sustainability. Pesticides and biotech crops help farmers make the most of the land already being used to grow food, which allows them to leave natural habitats untouched and support biodiversity.

Without these tools, farmers would need 50 per cent more land than they use today to grow the

same amount of food. To put that into perspective, that's more than the total area covered by New Brunswick, Nova Scotia and P.E.I. combined.

Plant science innovations also help farmers reduce greenhouse gas emissions and cut back on fuel use. These same technologies also help farmers improve the quality of their soil and make it less vulnerable to wind and water erosion.

Canadian farmers were among the early adopters of biotech crops more than two decades ago. Herbicide-tolerant crops enabled the wide-spread move toward conservation tillage practices. These crops allowed farmers to apply an herbicide directly to a crop to control weeds without harming the crop. This significantly limited the need for farmers to till – or plow – their fields to remove weeds.

If you ask almost any Canadian farmer who has embraced conservation tillage practices, they'll

tell you how it has helped them build organic matter and improve the health of their soil. And since a handful of soil contains more living organisms than there are people on the planet – this has a major impact on protecting biodiversity.

And not only have these tools helped agriculture be more productive but the industry has also made significant technological advances in the last 60 years, developing products that are safer and more targeted than ever before. Consider this: pesticides that hit the market today use 95 percent less active ingredient per acre than they did 60 years ago. This ultimately means farmers can apply lower doses of pesticides while still protecting their crops against insects, weeds and diseases.

And on top of that, today's pesticides degrade in the environment much more quickly than their predecessors. All this means we're doing a better job of limiting any unnecessary impact of agriculture on the environment while still equipping our farmers with the tools they need to grow safe, nutritious and abundant crops.

Fortunately, Canada's science-based regulatory system for both biotech crops and pesticides created an environment where farmers could

leverage the power of these technologies to improve their farming operations all while protecting human health and safety.

But not all governments embrace this sort of science-based approach to regulating agricultural innovations. And poorly constructed agricultural policies around the world are standing in the way of innovation, and as a result, driving unsustainable food production practices that threaten global biodiversity.

Europe, whose policies severely limit farmers' access to biotech crops and pesticides that have been deemed safe by countries around the world, is a prime example. Without access to these tools, European farmers simply cannot meet the demands of the European population for food and feed.

Europe must then import food from elsewhere, effectively exporting their environmental footprint for food production to countries like Brazil, which is converting forests into agricultural land to meet demand. The startling trend of deforestation in various parts of the world has devastating consequences for biodiversity.

The question of how we can protect global biodiversity is incredibly complex and

multifaceted. And agriculture is without a doubt part of the equation – or as I see it, part of the solution. History has shown that the agriculture industry has used the power of innovation to drive sustainability and we are poised to continue down this path.

But we need governments to be enablers, to create policy environments that support innovation so that farmers can continue to grow safe, high quality food all while protecting the environment. Agriculture will be part of the solution if governments let it.

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(Above) Source: Eugene Triguba, Unsplash

DON'T LET BAD WEATHER LEAD TO BAD DECISIONS

ADAPTED FROM NAAREF, PAASS PROGRAM, 2019 FLY SAFE MESSAGES

This year's weather has had a major impact on agricultural operations across much of [North America] the Country. Planting is way behind schedule for many crops. Growers are having to make decisions about whether or not to plant and the possibility of changing the intended crop. All of this will have an impact on pest problems and demand for aerial applications.

Do not let customer pressure force you into ignoring your personal safety limits. With crops

behind schedule there could be many acres that need to be treated in a short period of time. Customers who are feeling stress because of the conditions of their crops may be very demanding about getting their work done immediately. There can be requests for applications to fields that you aren't familiar with and are not comfortable spraying because of obstructions or other safety concerns. Keep safety as your top priority when making all of your decisions about which fields to do and how much you'll do during a day. Scout fields properly and keep your mind on obstructions at all times.

Keep up on aircraft maintenance. Don't skip work that needs to be done and don't cut corners in an effort to get done quicker. Dealing with an accident will cost far more time and money than doing the maintenance right the first time. Fight fatigue and be ready for many long days of flying by staying rested, well fed, and hydrated. Consider bringing in outside help to keep up with work demand and prevent fatigue of permanent staff. Keep an eye on mixers and loaders who are also susceptible to fatigue when work hours are extended for several days in a row.

CROP PROTECTION COMPANIES FIGHTING BACK IN CHEMICAL WARFARE

ERIC SFILIGOJ, EDITOR, CROPLIFE

For several months now, I — and the rest of the agricultural community — have followed the “open warfare” being waged on key products in the public sector. In particular, glyphosate has been getting plenty of attention, as jury trials have ruled in favor of plaintiffs who claim use of the herbicide had given them some form of cancer.

To date, more than \$150 million in damages have been awarded to these individuals — and there are more than 11,000 such cases pending. Furthermore, as a direct result of these verdicts, certain countries around the world, such as Vietnam, have banned the import of glyphosate into their territories.

As each of these stories has broken, I’ve received “gloating” emails from modern agriculture opponents touting “the end of Big Agriculture’s war on an unknowing public.” For more than a year now I’ve been warning the industry that this chemical warfare was beginning to heat up. I’ve also recommended that the agriculture companies themselves begin fighting back in the public arena. And I’m happy to report that agriculture appears to be going on the offensive!

Bayer (which owns the highest profile glyphosate manufacturer in the world, thanks to its acquisition of Monsanto) in December released to the public 300 glyphosate safety study summaries submitted under the European Union’s (EU) substance authorization process. In April the company released an additional 107 Bayer-owned safety studies submitted to the European Food Safety Authority as part of its transparency platform.

“Transparency is a catalyst for trust, so more



(Above) Syngenta Chief Sustainability Officer Alexandra Brand. Source: www.croplife.com

transparency is a good thing for consumers, policymakers, and businesses,” Bayer Crop Science Division President Liam Condon said. “By making our detailed scientific safety data available, we encourage anyone interested to see for themselves how comprehensive our approach to safety is. We embrace the opportunity to engage in dialogue, so we can build more trust in sound science.”

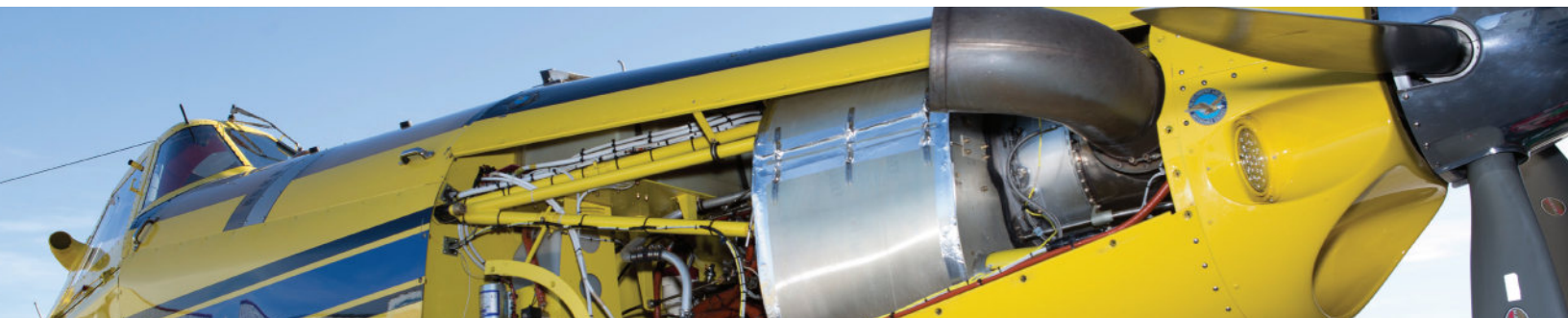
In a similar move, Syngenta has announced plans to accelerate its market innovations by working more closely with society, growers, academia, and environmental groups as it introduces new products for agriculture. The company plans to report transparently on the progress and

outcomes of these investments.

“There is a clear call for innovation and more action to address these challenges in ways where everybody wins — from growers to consumers and the environment,”

said Chief Sustainability Officer Alexandra Brand. “There is an undeniable demand for a shift in our industry. We will put our innovations more strongly in service of helping farms become resilient to changing climate and better able to adapt to consumer requirements.”

And it’s about time! Hopefully, these are only the first of many such industry attempts to fight back against the anti-agriculture movement.



AERIAL APPLICATION PARTS & MAINTENANCE



CLEANFARMS POSTS INCREASES IN 2018 AG-PLASTIC RECOVERY PROGRAMS

BARBARA MCCONNELL, COMMUNICATIONS, CLEANFARMS

Cleanfarms continues to demonstrate that Canada's agricultural community is committed to managing farm waste responsibly.

In its 2018 annual report recently released, Cleanfarms recorded an increase in recovery of its Canada-wide empty small plastic container collection program of 14% by volume over 2017. In total, farmers brought back nearly 5.8 million empty containers (23L and under) for recycling into new products such as farm drainage tile.

Cleanfarms is a national non-profit industry stewardship organization that is funded by the Canadian crop protection, fertilizer, seed and agricultural plastics industries. The collection and recycling of empty agricultural pesticide and fertilizer containers is the best known and longest running of its ag-waste recovery programs.

Overall, Cleanfarms' mandate is to contribute to a healthier environment by recovering agricultural and related industry plastics, packaging and products for recycling or safe disposal.

"Despite the challenges of shrinking overseas markets for recycled commodities, Cleanfarms continued to meet its goal of sending all materials collected for recycling to end markets to be remanufactured into new products. This is a prime example of the circular economy at work in the agricultural community," said Cleanfarms General Manager Barry Friesen.

Other Cleanfarms programs also posted increases in recovery. The collection of empty agricultural seed, pesticide and fertilizer bags in Eastern Canada climbed by 22% by volume over 2017. The largest increase occurred in Quebec where recovery numbers jumped to nearly 194,000 kg

from about 110,000 kg in 2017.

Fueled by the success of this program in Eastern Canada, Cleanfarms is pilot testing the collection of seed, pesticide and fertilizer bags in Manitoba, Saskatchewan and Alberta in 2019. Empty bags are recovered for proper disposal instead of being buried in landfill sites.

At the core of Cleanfarms' commitment to help farmers manage agriculture packaging and products responsibly is its unwanted pesticides and livestock medications collection program. Operated in partnership with the Canadian Animal Health Institute, the program provides an essential service to farmers allowing them to take old, obsolete and unwanted pesticides and livestock/equine medications to Cleanfarms drop-off locations. These materials are transported by a licensed waste hauler to specialized facilities where they are disposed of safely. The program rotates to all regions of Canada every three years. In 2018, 74 ag-retail partners in Nova Scotia, New Brunswick, Northern Saskatchewan, Southern Alberta and British Columbia collected for safe disposal a total of about 181,000 kg of unwanted commercial pesticides and nearly 2,500 kg of unwanted and obsolete livestock/equine medications.

2018 also marked the first year of the provincially-regulated grain bag recycling program in Saskatchewan. Though this program is just getting underway, it has already collected nearly 1,260 tonnes of grain bag plastic for recycling. The primary use for this recovered material is in the manufacture of garbage bags.

"Thanks to our industry members, Cleanfarms operates in the Canadian agricultural community as an important partner in helping farmers manage their farm operations responsibly and sustainably. That's what drives us to develop and expand programs that offer continuous improvement in access and convenience," Friesen said.

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BY THE NUMBERS – 2018:

5,777,030
empty pesticide
and fertilizer
containers
returned

44,367
non-refillable bulk
containers collected

365,792 kg
of empty seed,
pesticide and
fertilizer bags
returned

181,362 kg
of unwanted and
old pesticides
collected

2,483 kg
of unwanted and
old livestock and
equine medications
collected

1,291,010 kg
of grain bags, film
and twine collected



BAYER COMMITS MORE THAN \$7.5 BILLION TO FIND MORE HERBICIDE SOLUTIONS

THIS ARTICLE WAS ORIGINALLY PUBLISHED ON REAL AGRICULTURE

In a move said to increase transparency, customer engagement, and sustainability, Bayer AG has announced a series of measures to address concerns recently raised as the company took over Monsanto last year.

"We will continue to advance our standard, driven by our commitment to a better life for this generation and generations to come," says Werner Baumann, chairman of the board of management of Bayer AG.

The company recently announced more than \$7.5 billion earmarked for "new solutions" over the next decade to offer "more choice" to its customers, though specifically says it does not intend to steer away from glyphosate.

"This R&D investment will go towards improving the understanding of resistance mechanisms,

discovering and developing new modes of actions, further developing tailored integrated weed management solutions, and developing more precise recommendations through digital farming tools. In addition, partnerships with weed scientists around the world will be enhanced to help develop customized solutions for farmers at a local level," a news release states.

The company also plans on reducing its environmental impact by 30 per cent come the year 2030. It will achieve this by developing new technologies, scaling down crop protection volumes, and enabling more precise application.

Progress will be measured by the Environmental Impact Quotient (EIQ) and comparing it against the current market standards. The EIQ started back in 90's by Cornell University in the U.S. as it takes the volume to toxicity and therefore represents a more meaningful measuring system than volume only.

In the coming months, Bayer will be piloting a program that invites scientists, journalists, and NGO representatives to participate in its scientific preparation for the upcoming EU glyphosate re-registration process.

Bayer also announced the company will only sell crop protection products in developing countries that meet both the safety standards of that local market and the safety standards of a majority of countries with well-developed programs to regulate crop protection products. For the past seven years, Bayer has stopped selling all products that were considered acute toxicity class 1 by the World Health Organization, regardless of whether they were allowed in a particular market.

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FORESTRY INFO – FAQ

Forestryinfo.ca has an extensive list of questions and answers about Forest Renewal and Vegetation Management. If you can't find what you're looking for in the categories available on forestryinfo.ca, please submit your question to us.

Why are herbicides an important forest management tool?

Herbicides, such as glyphosate, play an important role in maintaining a viable wood supply for economic purposes and also contribute to an appropriate balance of conifer, deciduous, and mixed stands across the forest landscape.

Herbicides are typically used in Canadian forest vegetation management only where conifer crops (e.g., spruce and pine species) are to be regenerated and grown for products such as lumber, paper and wildlife habitat. Following harvest, numerous pioneer plant species (e.g., Canada blue-joint grass, raspberry, trembling aspen) that are well-adapted to invading disturbed sites and open growing conditions, easily outcompete young conifer seedlings for nutrients, light, water and growing space (Wagner et al. 2001, Balandier et al. 2006). Reducing competition from adjacent plants is essential for crop-tree survival and growth, much the way that weeding ensures success in the home garden. Of course, in contrast to the home garden, the scale at which forestry operations occur makes hand-weeding highly impractical. Herbicides allow effective, highly selective competition reduction in conifer crop production, at minimum cost (McDonald and Fiddler 1993, Wagner et al. 2006, Newton 2006, Dampier et al. 2006, Homagain et al. 2011). The use of herbicides in Canadian forest vegetation management is also heavily regulated and controlled in an effort to ensure environmental and human safety.

Should I be concerned about eating berries that have been sprayed?

Health Canada has determined that there is no health concern associated with eating berries (e.g. blueberries, raspberries) sprayed during forestry applications. This applies to large quantities of berries eaten at one time, or smaller amounts over a longer period of time.

Pesticide regulations are always developed applying a precautionary principle; that is to say, the intent is always to minimize both direct and inadvertent human exposure, as much as possible, within the context of the intended use of the pesticide product. Glyphosate herbicide has many food uses for which acceptable Maximum Residue Limits (the amount of residue of a pesticide which may lawfully be present in or on a food crop) have been established.

The PMRA, like all major regulatory agencies all over the world, derive Reference Doses, which define levels of a pesticide residue to which an individual can be exposed over a single day (acute) or over a lifetime (chronic) with no significant adverse health effects. Generally, dietary exposure to glyphosate from food and water is acceptable if it is less than 100% of the acute reference dose or chronic reference dose (the Reference Dose is also commonly known as the Acceptable Daily Intake or ADI). The PMRA has estimated potential acute (short term) and chronic (long term or lifetime) dietary exposures to glyphosate from residues of glyphosate and relevant metabolites in both treated crops, and from drinking water. Exposure to different subpopulations, including children and women of reproductive age, were considered. The acute dietary exposure estimate (from both

food and drinking water) at the 95th percentile represents 31% of the acute reference dose (ARfD) for females 13-49 years of age and ranges from 12% to 45% of the ARfD for all other population subgroups. The PMRA estimate indicates that the sum of exposure from dietary sources and from water represents only one eighth to one half of an exposure level not expected to be associated with adverse health effects. The PMRA also estimated that chronic dietary exposure for the general population represents 30% of the acceptable daily intake (ADI). Chronic exposure estimates for population subgroups range from 20% of the ADI (for adults aged 50 years or older) to 70% of the ADI (for children 1-2 years old). The PMRA concluded that acute and chronic dietary risks from exposure to glyphosate are not of concern (PMRA, 2015).

Glyphosate forestry products are also used in agricultural settings and it is therefore expected that the exposure to glyphosate from food products (i.e., fruits and vegetables from direct treatment with glyphosate) will cover potential exposure from inadvertent residues in berries following a forestry use. The potential inadvertent exposure from consumption of berries is therefore not of concern (PMRA, personal communication).

What are the chances that glyphosate will drift into bodies of water after being aerially applied?

Regulatory bodies require buffer zones to be created around streams, lakes, rivers and ponds near aerial treatment sites. The use of buffers around such systems essentially negates the potential for direct overspray of these aquatic systems. Buffer zones, in combination with advanced aerial application technologies including GIS-based mapping, electronic guidance systems and low-drift nozzles also help to ensure the herbicide does not enter such bodies of water either by accidental overspray or via off-target drift.

Owing to the application of advanced aerial application techniques, including GIS-based mapping, electronic guidance systems on aircraft, low-drift nozzles and the requirement for buffers around aquatic systems, there is a very low probability of toxicologically significant concentrations of glyphosate occurring in lakes, streams, or ponds. Well-validated aerial dispersal models predict very low proportions (< 2 %) of the depositing beyond 25 m downwind of spray blocks under aerial application scenarios as typically employed in major use provinces of New Brunswick, Alberta and Ontario. Several operational or semi-operational monitoring studies provide confirmatory evidence that the probability of inputs to aquatic systems protected by buffer zones is very low, and that where measurable concentrations do occur they are well below levels known to have toxicological effects on aquatic organisms. Potential inputs into small ephemeral wetlands via direct overspray or off-target drift represent a special case of relatively higher risk to species such as amphibians that inhabit these types of aquatic systems where these may occur within or immediately adjacent to spray blocks.

Under operational scenarios in Canadian forestry, spray blocks and surrounding areas are mapped using detailed GIS-based techniques. Buffer zones designed to minimize any potential for direct input into water bodies

such as streams, rivers, ponds and lakes are imposed as a protective measure. Advanced aerial application technologies including electronic guidance systems and low drift nozzles are employed and meteorological monitoring is undertaken to ensure that spray applications are made only to the target spray block and within established parameters of wind speed, temperature and humidity (Thompson et al. 2009; Thompson et al. 2012). In combination, all of these controls and mitigation measures reduce the potential for biologically significant inputs into aquatic systems. Based on validated modeling results, the amount of glyphosate depositing at distances of 25 to 65 m downwind of the spray block edge are estimated to be between 2% and 5.6% of the full application rate (Thompson et al. 2012; Payne 1993; Riley et al. 1991). Interception by vegetation within the buffer zone further reduces the potential for input. Field studies confirm both the low probability and magnitude of inputs into buffered systems under typical aerial spray operations (Thompson et al. 2004, Feng and Thompson 1990; Gluns et al. 1989; Adams et al. 2007). Similarly, Couture et al. (1995) summarizing multiple forestry studies conducted in the province of Quebec concluded that the 90th percentile of concentrations observed in water were <0.3% of the concentrations that cause high short-term mortality in aquatic organisms. Small, shallow, unmapped wetlands which may occur within spray blocks or immediately adjacent thereto are the aquatic systems most likely to receive direct chemical input via overspray or off-target drift.

How far does herbicide drift when it's sprayed from the air?

All jurisdictions in Canada specify the acceptable weather conditions in which aerial applications can be completed. Applicators are well trained to consider factors such as wind speed and direction, spray release height, temperature and humidity that can influence the potential for off-target drift. Modeling studies demonstrate that under common use scenarios drift is unlikely to exceed 2% of the application rate at distances greater than 25 m downwind

Aerial distribution systems for herbicide applications are designed and calibrated to produce large droplets. Large droplets deposit either directly beneath or immediately adjacent to the aircraft path.

For example, Thompson et al. (2012) used a modelling exercise to plot deposit from aircraft as commonly equipped for applications in three Provinces (Alberta, New Brunswick, and Ontario). The model predicted very minor fractional amounts of downwind deposit in all scenarios with deposit beyond 25m, never exceeding 2% of the application rate.

Applicators are trained to be constantly aware of environmental factors (wind, temperature, etc.) that influence drift and to observe label and regulatory requirements designed to minimize off-target drift.

Does glyphosate leach through soils and into groundwater?

Due to the chemical structure of glyphosate, the product binds quickly to soil particles and is very unlikely to leach into the soil and ground water.

Although glyphosate is quite water soluble, the molecule also carries both positive and negative charge that explain its strong binding affinity to soil organic matter and clay particles. As a result of its strong binding properties, it is considered to have very low potential to leach down through soils and into groundwater. Unlike agricultural scenarios, in forest vegetation management glyphosate-based herbicides are applied to sites with substantial competing vegetation cover and leaf litter on the forest floor. As such, much of the depositing spray cloud is intercepted by the target competing vegetation canopy or adsorbed to leaf litter, minimizing the amount of chemical that would actually reach the soil layer. Several studies in forest sites of Canada and the northern USA demonstrate that glyphosate and AMPA are strongly sorbed and typically retained within the upper 15 cm of soil and thus unlikely to move into surface or groundwater. In cases where there are sufficient rainfall residues bound to soil particles could be transferred to surface waters, although such residues are unlikely to be biologically available again owing to the strong binding affinity to organic matter and clay constituents.

In forest soils, glyphosate is rarely detected below the upper 15 cm level (Thompson et al 2000; Roy et al 1989; Feng et al. 1990; Legris et al. 1988; Newton et al. 1984; Newton et al. 1994), indicating that glyphosate is very unlikely to percolate down through forest soils and into groundwater. Given typical forest-use scenarios, the risk for groundwater contamination by glyphosate-based herbicides is substantially lower than that in agriculture, given the small percentage of the forest land base that is ever treated, that treatment sites are typically very remote from drinking water sources and that such source areas are protected by extensive buffers. However, even under agricultural scenarios where glyphosate-based herbicides are used extensively, typically only very low-levels of glyphosate are observed and even these occur very infrequently. Vereecken (2005) reported on several studies in European agriculture that also typically showed low level residues occurring infrequently in groundwater with no detections above drinking water standards in Denmark, the UK, the Netherlands or Norway. In another example, Battaglin et al. (2014) recently reported that of the total 1,171 groundwater samples analyzed from 807 different sites, glyphosate was detected in only 5.8% and AMPA in 14.3% of all groundwater samples. The maximum reported groundwater concentrations for the two compounds were 2.03 and 4.88 ppb respectively, far below the maximum acceptable concentration of 280 ppb established by Health Canada as protective of human health assuming a lifetime (70-year consumption) of 1.5 L of drinking water per day (Health Canada 2014). Similarly, a multiyear study of pesticide residues in 4 rivers in an agricultural region of southern Quebec showed the maximal concentrations of glyphosate ranging from 3.3 to 29.0 ppb (Giroux and Pelletier 2012). The latter value was considered to be the highest concentration of glyphosate observed in surface waters that might be considered as sources of drinking water (PMRA 2015) which concluded that dietary risk was not of concern either with respect to acute or chronic toxicity to humans generally or for subpopulations such as children and women of reproductive age.



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(Above) Source: www.realagriculture.com

SPRAYING A PESTICIDE WITH A DRONE IS STILL NOT ALLOWED IN CANADA

BY KELVIN HEPPNER, REALAGRICULTURE

The idea of spraying with drones has gained interest as unmanned aerial vehicles (UAVs) have become more common in farming over the past few years.

In concept, UAV sprayers could identify and target weeds, and then apply herbicide autonomously in specific areas of a field.

The technology for spraying with a drone is available and in use in other countries, such as Japan and parts of Europe. Drones designed for spraying are showing up at farm shows and field days. Transport Canada has even issued a flight operations certificate to at least one company that plans to spray with drones in Manitoba.

Despite the interest and investment from early adopters, spraying a pesticide with a drone in Canada is still not allowed under the Pest Control Products Act, unless you have a research authorization, according to Health Canada's Pest

Management Regulatory Agency (PMRA.)

That's because drone application is not on the label for any pesticides currently on the market, says the federal pesticide regulator.

The PMRA considers spraying by drone to be a new method of aerial application. Existing pesticide labels that say a product is approved for aerial application only pertain to fixed-wing or rotary manned aircraft.

One of the obvious differences is drones have much smaller tanks than ground sprayers or airplanes, requiring more fills to cover the same number of acres. While the risk of operator exposure to a pesticide while spraying should be reduced with drones, the more-frequent refilling could hypothetically be a risk area the PMRA would look at.

To date, the agency says no company has applied to have application via an unmanned drone added to a product label.

"Since the PMRA has not received any data or applications to support the use of drones for pesticide application as of June 29, 2018, it has not yet assessed the hazards or risks associated with the use of drones to apply specific pesticides."

To get drone application added to a product label, the PMRA says a pesticide manufacturer would have to submit an application, along with data describing the hazards and risks. The agency says the timeline for getting a decision would depend on the type and quality of the data that is submitted.

"Until this information is received, assessed and drones are included on a pesticide label, the use of drones to apply pesticides is not permitted," says the PMRA.

Anybody wanting to experiment with spraying by drone on a small number of acres can also work with a pesticide manufacturer to apply for a research authorization.

CAAA AWARDS

As you are going through this year's season make note of those individuals or organizations that are worthy of recognition.

Each year the Canadian Aerial Applicators Association recognizes the achievements of its members and others dedicated to aerial application. The CAAA awards highlight the commitment and efforts of those who work to advance the industry. It is up to you to nominate these unsung heroes and recognize their efforts with these six prestigious awards.

The deadline for nominations is December 31, 2019. The awards will be presented at the CAAA convention in February 2020.

THE FOLLOWING SIX NOMINATION CATEGORIES ARE:

AWARD OF EXCELLENCE

Past Recipients: 2018 Jim Wood, 2016 Clairon Seib, 2015 Dave Davies, 2014 Ken Kane, 2013 Jim Stonehouse, 2012 Brent Lange

WINGS OF AGRICULTURE AWARD*

Past Recipients: 2018 Benoit Tetreault, 2017 Jeff Farr, 2016 Nicolas Girard, 2015 John Bodie, 2014 James Pottage, 2013 Paul Zimmer, 2012 Nelson Almey

THE ACE AWARD

Past Recipients: 2019 Justin Farr, 2018 Darwin Penner, 2017 Aaron Sadler, 2016 George Giesbrecht, 2015 Tanner Denesowych, 2013 Keith Paetkau, 2012 Clayton Rempel

THE JUMPSEAT AWARD

Past Recipients: 2017 Jonair – David Frisch, 2016 Farm Credit Canada, 2015 Kevin Chorney – Bayer CropSciences, 2014 Battlefords Airspray, 2013 Univar Canada, 2012 Bayer Crop Sciences Canada

THE MVP AWARD

Past Recipients: 2019 Mario Morales, 2018 Christine Frisch, 2017 Bryan Dion, 2016 Ken Alarie, 2015 Bonnie Brotherston-Bagley, 2014 Ryan Lecoq, 2013 Arlene Almey, 2012 George Scott

THE CAAA PILOT OF THE YEAR AWARD*

Past Recipients: 2019 George Giesbrecht, 2018 John Floyde, 2017 Rick Kornelson, 2016 Curtis Burke, 2015 John Dornian, 2014 Gord Boklaschuk, 2013 Jack Appleton

Application forms are available on the CAAA website www.canadianaerialapplicators.com. Contact the CAAA office for any additional information or questions you might have regarding the awards.

*Membership must be current by February 28, 2019 to be eligible.

CAAA MENTORSHIP PROGRAM

The CAAA's Mentorship Program provides a confidential source of experience sharing and mentoring to all new applicators. The CAAA has gathered names of individuals who have agreed to act as mentors and talk confidentially with applicators throughout the upcoming season. The individuals listed below are available to speak with any applicator on a totally confidential basis. Please contact anyone of them if you have questions or need direction during the season.

Jon Bagley	Operator	Bus: 204-763-8998	Cell: 204-729-7723
Allan Denesowych	Maintenance Engineer	Bus: 306-786-7007	Cell: 306-621-5137
Fran de Kock	Operator/Training	Bus: 306-445-3099	Cell: 306-441-0547
Bruce Gair	Pilot	Bus: 780-352-7833	Cell: 780-352-1278
Clarion Seib	Pilot	Bus: 306-786-6072	Cell: 306-621-7171

2020 AGRICULTURAL AVIATION SCHOLARSHIP

Purpose	The goal of the CAAA Agricultural Aviation Scholarship is to strengthen the aerial application industry by helping CAAA Operators bring new pilots into the profession. Each applicant must be sponsored by a CAAA Operator, and scholarship recipients must use the proceeds for flight training or agricultural coursework at a university, college, community college, or other institution of higher learning.
Amount	The CAAA Agricultural Aviation Scholarship Program will award one (1) one-year scholarships to a deserving, qualified student(s) participating in one or more of the following programs: <ol style="list-style-type: none"> 1. A certified flight training program 2. An agriculture, agribusiness or ag vocation program for a second-year or later student(s) enrolled in a 2-year or 4-year program of study at an accredited junior college, college or university. CAAA will award one \$2,000 scholarship annually for the life of the program. One award per applicant. The CAAA reserves the right to withhold scholarship if no suitable application received.
Eligibility	<ol style="list-style-type: none"> 1. Entrant must be sponsored by an CAAA Operator. 2. Prior CAAA Agricultural Aviation Scholarship winners are not eligible.
Sponsor	<ol style="list-style-type: none"> 1. Each applicant must be sponsored by an CAAA Member Operator. 2. An Operator may sponsor only one applicant per year.
Application	Applicant should fill out ALL "applicant information," sign the form and give the application to the CAAA Operator Sponsor.
Deadline	All applications must be received or postmarked by December 31st to be eligible for scholarship funds available for the following calendar year (January-December).
Process	The Sponsor will complete the CAAA Agricultural Aviation Scholarship sponsor form, add a letter of recommendation, and forward all required information via: <p>Mail: 202, 5405 99 Street NW, Edmonton, AB T6E 3N8 Fax: (780) 413-0076 Email: info@canadianaerialapplicators.com</p>
Checklist	<ol style="list-style-type: none"> 1. Completed application 2. One (1) letter of recommendation from the CAAA Operator sponsoring the applicant. 3. Essay of 250 words or less explaining how you would use the CAAA Agricultural Aviation Scholarship to further your education and training. 4. Current one-page résumé or list of activities <u>detailing all agricultural and aviation experiences, education and training.</u> 5. If scholarship proceeds are for flight training: <ol style="list-style-type: none"> a. Provide proof you are enrolled or have been accepted for enrollment in a certified flight training program (ag or otherwise). 6. If scholarship proceeds are for ag-related coursework at a college or university: <ol style="list-style-type: none"> a. Submit an official transcript from applicant's college, junior college or university. b. Provide proof that you are seeking an undergraduate or graduate degree in an agricultural, agribusiness or an ag vocation field. 7. All applications must be received or postmarked by December 31 to be eligible for scholarship funds.
Selection Process	<ol style="list-style-type: none"> 1. All applicants will be evaluated based on the following criteria: need, prior experience, likelihood of retention in the aerial application industry, strength of operator's recommendation letter, and strength of applicant/candidate's essay. 2. Applications will be reviewed, and winners chosen by the CAAA Awards Committee. 3. Winner will be notified at the CAAA Annual Convention in February. 4. The decision of the CAAA Awards Committee is final.
Payment	A tuition bill must be presented verifying enrollment of the applicant. If tuition has been paid in full, upon proof of such payment, CAAA will remit payment to the scholarship recipient. Any funds paid directly to the applicant as part of this award not used for approved higher education expenses must be returned to CAAA. Paid receipts for tuition or higher education expenses must be provided. Scholarship recipients must provide proof of expenses to CAAA by June 1st of the year following the award to receive funds.
Revisions	CAAA reserves the right to review the conditions and procedures of this scholarship program and to make changes at any time.

APPLICATION FORM

First Name:		Last Name:	
Address:			
City:		Province/State:	Postal/Zip Code:
Phone:		Email:	

UNIVERSITY, COLLEGE, COMMUNITY COLLEGE, FLIGHT SCHOOL OR OTHER FLIGHT TRAINING PROGRAM INFORMATION

Institution Name:		Program:	
Address:			
City:		Province/State:	Postal/Zip Code:
Phone:		Enrollment Contact:	
Course of Study:			
Description:			
Enrollment Status:		Length of Program:	
Enrolment start date (MM/YY):		Expected completion date (MM/YY):	

Please attach a short overview, in 250 words or less, of why you want to pursue a career in agricultural aviation and how you would use CAAA's Agricultural Aviation Scholarship to further your education and training.

Applicant Signature	Date

SPONSOR (CAAA OPERATOR MEMBER)

Sponsor First Name:		Sponsor Last Name:	
Company Name:			
Address:			
City:		Province/State:	Postal/Zip Code:
Phone:		Email:	

Relation to Employee (choose as many as appropriate):

Family Member Employer (current/past) Other (specify):

If not a family member, how long have you known the applicant?

Please attach a letter of recommendation for the attendee, comment on the applicant's agricultural or flying background as well as general character, focusing on why you believe the applicant will become a good ag pilot and what the applicant must do to further his or her training and development.

CAAA Operator/Sponsor's Signature	Date



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702 AIR OPERATOR CERTIFICATE EXPERTISE

POSTED BY: Ted Delanghe
EMAIL: ted.delanghe@gmail.com
PHONE: 306- 531-5935

We offer a comprehensive, proven track record for obtaining a 702 Air Operator Certificate, from initial Statement of Intent with Transport Canada (TC), through to final certification, including all communications with TC and the production of the required 14 primary and administrative documents.

702 AIR OPERATOR CERTIFICATE EXPERTISE

POSTED BY: Ted Delanghe
EMAIL: ted.delanghe@gmail.com
PHONE: 306- 531-5935

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TURBINE AG PILOT WANTED

POSTED BY: Rick Heard
EMAIL: tarrickfic@hotmail.com
PHONE: 306-741-1969

Tarrickfic Aerial requires a qualified commercially licensed professional Ag Pilot for the 2019 season to fly an Air Tractor Turbine.

Full time seasonal position with the anticipated start date of June 1st to September 1st, 2019.

Requirements are as follow:

- Canadian Commercial Pilots licence, with a valid appropriate medical
- Saskatchewan and Manitoba Aerial Pesticide Applicators licence
- Must have 5yrs or more experience with a minimum 1000 hours turbine agricultural experience with an AT402 and AT502
- Excellent operational knowledge of Satloc GPS Systems
- Proficient in speaking, reading, and writing English
- Must be acceptable by CAIR as insurable (accident free record)
- Must be able to maintain journey logs as required by Transport Canada guidelines.
- Work with customers and ground crew in a professional manner
- Applicants must be able to complete other duties related to the position, as required

Wages will be \$40.00/hr based upon a 40/hr week and vary depending on experience and acres sprayed. Interested applicants please send resume with references via email to tarrickfic@hotmail.com

Rick and Barb Heard
Tarrickfic Aerial Ltd
PO Box 60
Abbey, SK
SON OAO
email: tarrickfic@hotmail.com

AIRCRAFT MAINTENANCE

POSTED BY: Roland Jenson
EMAIL: rolandjenson@hotmail.com
PHONE: 306-867-7725

Cloud 9 Airspray is pleased to announce the opening of a commercial aircraft maintenance facility AMO 61-18 at Outlook Sask. 1-306-867-7725.

Call Roland for any of your aircraft maintenance needs.

AIRPLANE FOR SALE

POSTED BY: Roland Jenson
EMAIL: rolandjenson@hotmail.com
PHONE: 306-867-7725

For sale, 1970 Ag Wagon, \$118K cad, TTA 5,231.1, IO- 520D TTSMOH 1250, TTSP0 0, stripped painted, new cables, 200 gal hopper removed and redone, new hopper seal, prop overhauled by PropWorks, mags overhauled, Kenzie exhaust, compression mid to high 70's all cylinders, gear legs removed and overhauled, bolts and saddles NDT, new tires, new brakes lines, Cleveland's, Satloc lite star, Weath Aero fan, smoker, new windows, new load valve. Airplane has been gone thru and many new parts installed. If your getting started in the spray business this is an excellent starter plane. Call today Roland 1-306-867-7725

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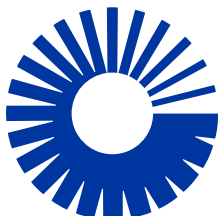
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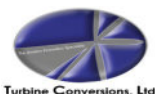
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