where my dog was lying in pain, then the magpie flew away, mission accomplished. Some neighbor had illegally put garbage out "to feed the critters" but our dog had gotten out, eaten it, and that rotten garbage killed her. One year, a blue jay family nesting nearby had watched my outdoor art class every afternoon for weeks. When the babies fledged, they flew to our water fountain, then perched on our easels! They had been secretly observing us from their nest, and apparently thought of us friends. We were delighted

Stay tuned for my local hummingbird festival art and etiquette walks and talks. We observe hummingbirds from last year's clutch returning to their favorite habitats.

Janet Sellers is an avid gardening ethnoecologist. Contact info: JanetSellers@ ocn.me.

Art Matters

Zoom fatigue: Artists have a cure



By Janet Sellers

Zoom viewers report exhaustion at the middle and end of their day. Not to vilify Zoom, but many people are calling any kind of conference call on a screen "zooming." For my art exhibits (now online) and art classes, we use virtual experiences when a student must self-quarantine or for snow days. Yet we are energized, not taxed.

Our successful experiences may have to do with the way we are doing the experience—the way we are using our eyes and bodies. Artists have always avoided easel fatigue (the closerange viewing of the artworks) with movement and body stance. Artists work many hours a day with the easel at arm's length but move away from the easel to assess the distanced piece. A human being only takes in the entirety or one part of what they see—it's one or the other and not simultaneously.

In the studio, we move away from the easel for what I call a "15-foot look" to assess the integrity of the artwork. In a 90-minute class, we get up every 10 or 15 minutes to view our work, we are grasping physical tools and using them, and these micro and macro movements facilitate vitality and agility. We still do this for Zoom classes. Using a wide-angle external camera really helps when we need to move around to demonstrate techniques and helps with natural eye movement for both teacher and student to view artworks in progress—which is also critical to visual perception and memory skills.

Zoom fatigue

Stanford University researchers have developed the Zoom Exhaustion and Fatigue scale, or ZEF scale, to help measure how much fatigue people are experiencing in the workplace from video conferencing and have identified major causes of screen fatigue with meetings. Four of the identified stressors are:

- eye contact and the size of faces on screens is highly intense and unnatural. On Zoom calls, everyone is looking at everyone all the time
- Seeing yourself during video chats constantly in real-time is fatiguing. Studies show that when you see a reflection of yourself you are more critical of yourself.

- 3. Video chats dramatically reduce our usual mobility.
- 4. The cognitive load is much higher on video chats.

I asked one of my colleagues at our weekly meeting with Singularity University about virtual reality (VR), because he is researching virtual reality for education at Stanford. He told me that VR was more tiring than computer screens, because moving around in a virtual lab was physically, psychologically, and mentally unfamiliar.

A balancing act

Moving around throughout the day, particularly getting away from sitting at a screen, looking at distant objects as well as grasping objects several times an hour, is important to offset screen overload and also improves our ability to do our work and feel good throughout the day. Using adaptations such as artists use in the studio, and transferring them to screen life, could help us through these screen life times.

Janet Sellers is an artist, writer, and teacher. Contact her at JanetSellers@ocn.me.



Above; When we touch and flip through book pages, we're using haptic, or handeye, coordination. Coordinating visual focus with haptic feeling has a unique cognitive effect. It puts our minds into an immersive state of concentration, enhancing reading comprehension. In reading books, light reflects off the page before meeting our eyes. When reading from screens, the light comes through the screen directly to our retinas, making it difficult to look at, and we tend to skim read at best. Photo courtesy of Claire Dauwe—and Tate.

Snapshots of Our Community

Bearbotics season begins



Above: Bearbotics team members and Eckehart Zimmerman, local mentor from Triad Engineering, considered mechanical engineering and robot chassis designs on Jan.16. The Build Season for Bearbotics FRC Team 4068 got underway with the For Inspiration and Recognition of Science and Technology (FIRST) Robotics Competition Kick-off on Jan. 9. From left are Gabe Middleton, David Nunez, Parker Garner and Eckehart Zimmerman. *Photo by Finn Williamson.*

Ham radio field day, Jan. 30

Right: It was cool in the shade for Winter Field Day at Fox Run Park on Jan. 30, but it was good weather to practice doing remote and outdoor amateur radio operations to prepare for emergencies. The hams used a variety of transmission modes and power sources. One operator used Morse code and 5 watts of power and made a contact with a station in Puerto Rico. See https://w0tlm.com/ for more information. *Photo courtesy of Greg Smith*.



The Great Fruitcake Toss, Jan. 23



Above: On Jan. 23, the Gail Force, a five-member team from Monument, was once again a participant in The Great Fruitcake Toss in Memorial Park, Manitou Springs. At the invitation of the event organizers, the Manitou Springs Chamber of Commerce, this multi-year, award-winning team gave a mechanically assisted demonstration for the crowd. This annual family-oriented event is celebrating its 25th anniversary and is supported by local and out-of-state sponsors and volunteers. Posing in this photo is the Gail Force team with its slingshot launching device, banner flags and fruitcakes. From left are Barrie Towne, Dave Wittman, Wayne Timura, and Greg Wetzel. *Photo by Sharon Williams*.

Archery lesson, Jan. 31



Above: Four-year-old Penny Davey got an archery lesson from her dad, Dan, on Jan. 31. The site is in the open space behind the Lake of the Rockies community in Monument. There's a sandy section where Penny could shoot her arrows without any danger of hitting people or animals. *Photo by Michael Weinfeld*.