#### Basic Digital Photography for

Tom Rosenbauer

Fly Fishers

Before buying a camera, decide what is most important to you









#### Digicams

- Small and inexpensive
- Zoom lenses
- Also offer very good video capability



### They are disposable!



#### What to look for in a digicam

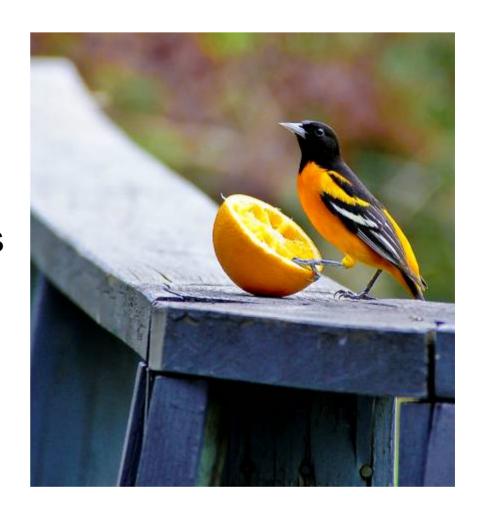
- Optical image stabilization
- 6 megapixels or better
- At least 3X zoom (most have it)
- Optical zoom during video filming
- Image quality of waterproof cameras is not great—yet. But OK for snapshots
- Get a waterproof housing!

#### How to use a digicam

- Set program button to P (Program), A (Aperture preferred), or S (Shutter preferred) and leave it there. Don't use the automatic setting.
- Turn off digital zoom
- Turn off ISO shift
- Set sharpness and saturation to +1
- Turn on image stabilization

#### D-SLR

- They are fast
- Bigger sensor =
   higher image quality
   even for the same
   number of megapixels
- Ability to switch lenses
- Bigger and better flash



#### **DSLR**

- Much more control
- Higher ISOs, RAW files
- Manual focus
- Optical viewfinder
- They make you look cool



#### Tech stuff you should understand

- F-stop. The aperture that lets in light
- Shutter speed. How long the shutter stays open
- The relationship between the above 2
  determine your depth-of-field, how much
  action you can freeze, and how steady you
  need to hold your camera

#### Tech terms: f-stop

- The bigger the number the smaller the opening and the greater the depth of field
- The smaller the number the less depth of field but the faster shutter speed you can get
- Most lenses are sharpest at f8 to f16

#### Use DOF to get the shot you want





#### Tech terms: depth-of-field

- For practical purposes, it's easier to manage depth of field through use of wide and telephoto lenses
- DOF is very shallow with macro shots, shallow with telephoto shots, and widest with wide angle lenses

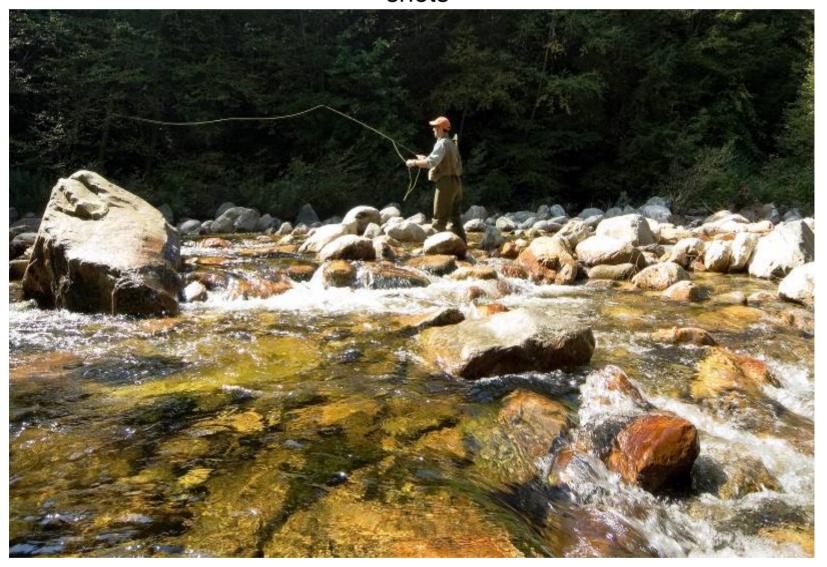
## Wide angle



## Telephoto



Wide angle, with great depth of field, is what we want for most of our shots



#### Tech terms: ISO

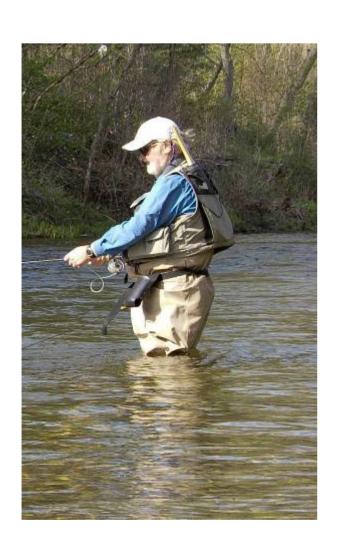
- The higher the ISO, the faster the shutter speed.
- With high ISO 800+ you can shoot in candle light or early morning
- Native ISO on most cameras is 100-200
- Higher ISOs give you more noise (grain), especially in digicams

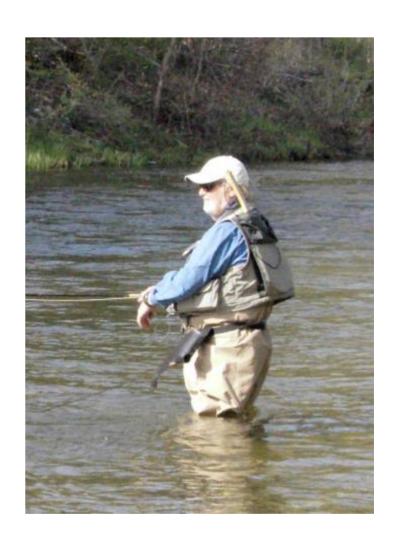
#### ISO 200 vs. 1600





### 200 vs. 1600 crops





#### The megapixel hoax

- All you need is 6
- But 6 good ones
- Not all megapixels are created equal

#### What good megapixels give you





#### Tech terms: shutter speed

- The biggest reason for fuzzy shots used to be camera shake
- With image stabilization, the old rule of shutter speed=lens is not as important
- Fly lines are best shot a 1/250<sup>th</sup>.
- Birds and insects best at 1/500<sup>th</sup>.
- Freeze moving water at less than ¼ second
- Invest in a tripod

#### What kind of lens should I buy?

- Prime or zoom?
- Wide angle, normal, telephoto?
- Are expensive lenses worth it?

#### Macro



## You can't \_\_\_\_ and take great pictures

- If you fish or ski or kayak and take photos, you'll get snapshots
- For the best photos, leave the rod at home, take snowshoes, or stay out of the boat
- Devote an entire day to photography and you'll be amazed at the result



## Learn your client's camera at the boat ramp

- On/off button
- Zoom button
- Flash button (flash off, flash auto, force flash)

#### Put some action in your photos

- People laughing
- Loading a boat or helicopter
- Jumping out of a boat
- Running downriver to chase a fish
- You have to get ready for these shots and be set up to catch the moment



## Get the shot now, don't depend on the software

- No amount of tweaking can compare to dramatic morning or evening light
- You can't make a soft image too much sharper
- Color casts and cropping are the easiest to fix

### Midday vs. morning light





# Plan your shots first, especially releasing fish photos



#### Take LOTS of shots

- They're free
- Memory cards are cheap as dirt
- Then edit heavily and quickly

## What are all those buttons for and do I need them?

- Outdoor photographers like buttons rather than menus
- Zoom button
- Delete button
- ISO button
- Exposure compensation button
- Macro button
- Fill flash button and flash compensation

# You can do things with a RAW image you can't do with a jpeg





#### Sharpness

- Under sharpen for screens
- Over sharpen for prints
- It won't cure a bad shot, will only make it jaggier

### Sharpened for web and print





# Cropping and the Rule of Thirds





## Image editing programs

- Picasa from Google (free)
- Adobe Elements (free with some cameras and scanners)
- Camera software (free, sorta)
- Photoshop Lightroom (\$300)
- Photoshop CS3 (\$500)

### E-mailing photos to clients

- Size them down—not everyone has quick downloads
- Windows and Picasa do this automatically
- You can also post galleries on free photo sharing sites like Flickr or Picasa Web Gallery

#### Presenting Your Images

- Free web galleries (Picasa, Snapfish, Flickr, Photobucket)
- Slide shows directly on your TV or Power Point, Lightroom, Windows Media Player
- Don't be a father-in-law. Edit heavily

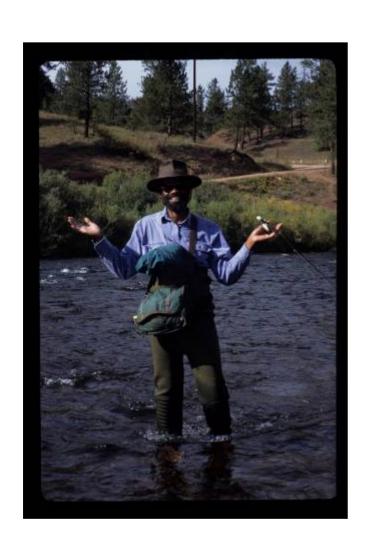
# Tips for making a slide show

- Start with a bang—shocker slide or something humorous
- Make it logical—it's as hard to edit a good presentation as it is to edit a book chapter
- Always know what slide is up next
- Add drama
- For eye relief, use a mix of wide angle, normal, telephoto, macro, and ultra wide if you have the lenses.

# Don't just show big fish



#### Use reaction shots





#### Use offbeat stuff



# You can make a shot look old with a single click of your mouse



#### And don't always end on a cliché!













