

A few more finesses

Abbreviations

Explain at 1st mention except for the well established
(UN, EU, AIDS, DNA)

Avoid in title (and abstract)



Units

In full when in text - abbreviated when quoting values

We measured the mass in milligrams.

BUT

Mass of an elephant was 10⁹ mg.



Use spaces between the value and the unit.

A few more finesses

Math

Use spaces on both sides of operation symbols: $p = a + b$

minus ≠ hyphen *minus: 5 - 1 = 4;*

hyphen: sites 1-4 or day-to-day sampling)

Use negative exponent rather than fraction:

$g \text{ dm}^3$ or $g \times \text{dm}^3$ is better than g/dm^3

Use ONLY SI UNITS e.g. dm^3 , not L

Decimal mark - point or comma?

math (& english standard + Asia) - • $1.5 + 1.6 = 3.1$

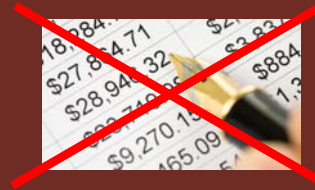
writing (Europe; hrvatski pravopis 2013.) - ,

I had 1,5 kg of lamb for lunch.

A few more finesses

The 22nd General Conference on Weights and Measures:

... numbers may be divided in groups of three in order to facilitate reading; neither dots nor commas are **ever** inserted in the spaces between groups.



Writing - scientific style



AIM: to convey your message well
minding the logical flow of ideas and work procedures

HOW:

0. Impeccable grammar, syntax and spelling

1. Comprehensibility and clarity with sound reasoning!
(keep it concise, direct and short)

2. Inambiguity
(watch for the structure and style - disable ambiguity)



Let (a colleague) review

Keep in mind the audience and leave an impression of impartiality

Language

Verbs:
*The only words capable of expressing action ?
 are verbs and their derivatives.*

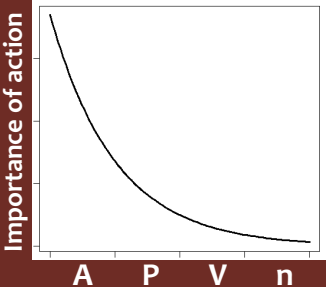
Inigorating verbs will make writing more concise and easier to read.

Active voice
 When we reduce dose, ...

Passive voice
 When dose is reduced, ...

Verbal
 With reduced dose, ...

Verb-derived noun (n)
 With the reduction of dose, ...



Common mistakes

Voice (Active/Passive)

*Nature journals like authors to write in the **active voice** ("we performed the experiment...") as experience has shown that readers find concepts and results to be conveyed more clearly if written directly.*

Nature

*Use **active voice** when suitable...e.g., 'To address this possibility, we constructed a lZap library ...' not 'To address this possibility, a lZap library was constructed...'*

Science

Common mistakes

Voice (Active/Passive)

- It was established by the experiment that...
- We have established through the experiment that...
- Content of dissolved oxygen was measured using a digital oximeter (WTW oxi 95), daily in the period from May 13th to June 13th.
- I measured the content of dissolved oxygen daily at noon from May 13th to June 13th using an oximeter (WTW oxi 95).

Passive voice is allowed in Abstract

'The research was carried out' paradox

Common mistakes

Tense:

- Your result, previously unknown – past tense;**
Drusus croaticus individuals emerged on sunny days.
- Known result – present tense**
Drusus individuals emerge during dusk (Kučinić, personal communication).

A negative effect of turbidity **was found** on total Ephemeroptera ...

We **observed** that calcite precipitation **was promoted** by leaf litter decay.

Passive filterer taxa **are known** to be sensitive to siltation disturbances...

Cum grano salis! A published result – past tense (depending on style)
Baetis genus **was previously reported** as one of the most sensitive to sediment disturbance (Bond & Downes, 2003).

BUT IT IS BETTER: *Baetis* is among the most sensitive taxa to sediment disturbance (Bond & Downes, 2003).

Common mistakes

Tense:

Conclusions – Present tense

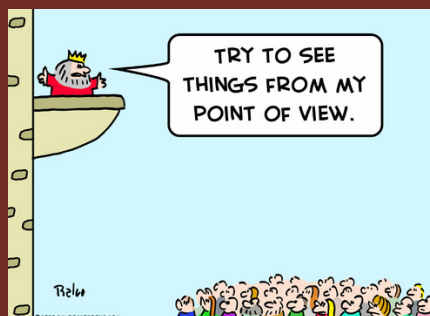
- ✓ We conclude that limiting food resources **is** an important aspect in ...
- ✓ This suggests that tufa deposition **is** at least indirectly promoted by the decomposition process.

Section	Verb tense	Examples
Introduction	Present or past tense for describing the evidence that exists	It is known that ... There is no evidence that ...
	Past tense for describing your aims or hypotheses	Therefore, we investigated whether ...
Methods	Past tense throughout	Participants were recruited from ...
Results	Past tense for results	We found that ...
	Present tense to refer to tables, etc.	Figure 1 shows that ...
Discussion	Present tense for answers to questions	Our findings suggest that ...
	Present tense to discuss the literature	Evidence from cohort studies shows that ...
	Past tense to discuss the results	We found that ...

Common mistakes

Verb derived nouns

- ✗ We carried out the study...
- ✓ We studied...




Person:

- Biology (Natural sciences)
 - One author – first person singular
 - More authors – first person plural

Other 'sciences' - third person!



	<p>Common mistakes</p> <p>Empty words and phrases</p> <p><i>We don't listen any more. Perhaps because words are very cheap and so many are thrown away each day. Our loss of critical listening skills leaves us vulnerable to manipulation by words which have no meaning... [...] Empty phrases are meaningless and loaded with emotion. Their use takes away the opportunity for calm, objective discussions...</i></p> <p><i>Richard B. Shepard, Applied Ecosystem Services, Inc.</i></p> <p>Example</p> <p><i>After careful consideration of all the foregoing lines of evidence, it is apparent to us that among all the antibiotics discussed, penicillin is the one that should be chosen for the treatment of infections caused by Streptococcus.</i></p> <p><i>We conclude that streptococcal infections are best treated with penicillin.</i></p>	
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	<p>Common mistakes</p> <p>Empty words and phrases</p> <p>Formalisms</p> <p>Homework</p> <p>Note the emptyness ☺ in mass media</p> <table border="1"> <tr><td>Have an effect on</td><td>affect</td></tr> <tr><td>Cause a change in</td><td>change, alter</td></tr> <tr><td>The mechanism by which</td><td>how</td></tr> <tr><td>Causes an increase in</td><td>increases</td></tr> <tr><td>Represents</td><td>is</td></tr> <tr><td>Has been shown to be</td><td>is</td></tr> <tr><td>Demonstrate</td><td>show</td></tr> <tr><td>A majority of</td><td>most</td></tr> <tr><td>In greater abundance</td><td>more</td></tr> <tr><td>Accounted for by the fact that</td><td>because</td></tr> <tr><td>As a consequence of</td><td>because</td></tr> <tr><td>Due to the fact that</td><td>because</td></tr> <tr><td>Despite the fact that</td><td>although</td></tr> <tr><td>Has the capability of</td><td>can</td></tr> <tr><td>If conditions are such that</td><td>if</td></tr> <tr><td>It is clear that</td><td>clearly</td></tr> <tr><td>It is worth pointing out that</td><td>note that</td></tr> <tr><td>It may, however, be noted that</td><td>but</td></tr> </table>	Have an effect on	affect	Cause a change in	change, alter	The mechanism by which	how	Causes an increase in	increases	Represents	is	Has been shown to be	is	Demonstrate	show	A majority of	most	In greater abundance	more	Accounted for by the fact that	because	As a consequence of	because	Due to the fact that	because	Despite the fact that	although	Has the capability of	can	If conditions are such that	if	It is clear that	clearly	It is worth pointing out that	note that	It may, however, be noted that	but
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Common mistakes

Empty words and phrases
Formalisms

I	II	III	IV
Dame i gospodo	realizacija programa koja smo usvojili	primoravaju nas na realiziranje	postojećih administrativnih i finansijskih uvjeta.
S druge strane	prostor i mjesto koje zauzima obrazovanje	igra značajnu ulogu u utvrđivanju	osovina budućeg razvoja.
Tako isto	konstantni rast kvalitete i kvalitete naših proizvoda (usluga)	primorava nas na preciziranje i definiranje	sustava opće participacije.
Ipak, ne zaboravimo da	sašađnja struktura organizacije	pomaže nam u pripremi i kovanju	stavova u skladu sa zadacima koje je utvrdila organizacija.
Na taj način	novi model aktivnosti	garantira veliko učešće i razradnja	novih prijedloga.
Svakodneva praksa pokazuje da	naša stalna briga oko informiranja i edukacije	doprinosi u značajnoj mjeri stvaranju	osnova progresističkog obrazovanja.
Nije potrebno isticati značaj ovih problema jer	jačanje i širenje struktura	u velikoj mjeri doprinosi uspostavljanju	sustava obrazovanja kadrova koji je prilagoden potrebama.
Elogato i raznovrsno iskustvo	razvoj raznih oblika aktivnosti	omogućava nam bolju procjenu	uvjeta koji odgovaraju ubrzanju naših aktivnosti
Briga oko organizacije, a prije svega	konzultiranja širokih slojeva aktivista	predstavlja zanimljiv pokušaj isprobavanja	jednog modela razvoja
Visokoidološki kriterij kao i	pokretanje odlučne kampanje	započinju proces koji ima za cilj usavršavanje	raznih oblika utjecaja.

That is why I want to start the initiative that would appropriately regulate this issue. I expect the contribution of experts and all political stakeholders.

Common mistakes

Jargon and 'fancy' words

↓ ↓
Axonal signals transiently activate the expression of the transcription factor Oct6 in Schwann cells that will form myelin.

Swearing rather than being a **maladaptive** pain response actually produces a **hypalgescic** effect.

Limnological research of the rheikotopes and the phenomenon of streamflow travertinization...

Coenoses of rithron and potamon of Sava.

7

EXAMPLES

In aquatic habitats of karst regions (carbonate based geological substrate) a phenomenon of calcite deposition may occur. In temperate zones and non-thermal (flowing) waters the deposit that forms is called tufa. It is a porous structure and hence sponges that develop in carbonate supersaturated waters (Cherfi and Pail, 1984), where calcite crystals are deposited on immersed objects including organisms such as algae and mosses and animal originating structures.

Furthermore, some泉泉ies utilize water in the exhalation process and are situated near natural water supplies that could be affected. Disboun (used for asphalt mixture)泉泉ies are a typical example.

An accurate understanding of the spatial relationships between the structures of the head is essential for anthropological methods concerned with the comparison of faces to skulls or the prediction of faces from them.

Common mistakes

Repetition
 Figures / Tables - in main text
 Figures - in Tables and *vice versa*
 Results - in discussion
 Of already published procedure (in Methods)

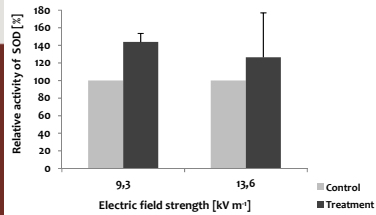



Fig. 1. Superoxide dismutase (SOD) activity in *Euglena* under stress in comparison with the control activity.

- Fig. 4 and Table 3 show** that the diversity of macroinvertebrates ranged from a minimum of three taxa in fall to 8 taxa in spring at site 1.
- The diversity of macroinvertebrates at site 1 peaked in spring (Fig. 4).
- In Figure 1 we present** the superoxide dismutase activity in *Euglena* under stress and under control conditions.
- Superoxide dismutase activity was higher in specimens that endured stress than in control specimens (Fig. 1).

Common mistakes



Chapter mixing
 Results in Methods chapter
 Results in Discussion chapter (and the other way around)

Shredders dominated the community with 71% of total number of individuals which suggests that the main energy sources is leaf litter.

Insufficient data

- Can I reproduce my own work purely by following what I wrote in Methods?
- Can I unambiguously deduce my conclusion from data I presented in Results?

Common mistakes

Lack of conciseness (wordiness)



The data that were collected in this study were obtained by walking 6 x 500 m transects that traversed, from one side to the other, study plots in each of the four forest compartments (K14, K15, K16, K17) listed in the previous section.



We obtained the data by walking 6 x 500 m transects in each of the four forest compartments.

Lack of data



Pitfall traps were set up at several transects and sampled at equal intervals during the project period.



We set up fifty pitfall traps 15 cm diameter and 15 cm deep, at least 10 m apart in each of ten transects and sampled at weekly intervals between April and June.

Common mistakes

Excessive writing

Is this passage/result/procedure essential to the message of the work?

Oversized sentences

Keep them around 20 words / up to 3 lines



We found that the content of X was significantly higher when the specimens were treated with ethanol than when they were treated with ethanol and nicotine simultaneously, which may reflect their lower ability to sustain light organic compounds contrary to previous reports that they are readily metabolised in similar organisms (Smith, 2000.).

We found that the content of X was significantly higher when the specimens were treated with ethanol than with both ethanol and nicotine. || Thus, we propose that specimens are more vulnerable to light organic compounds. || However, some organisms were proven to readily metabolize them (Smith, 2000.).

Common mistakes

Indirectness

There are several studies published in favor of flood pulse management of dams discharge (Robinson et al. 2012, Konrad et al. 2013).

Flood pulse management is vastly favored... (Robinson et al. 2012, ...)

It has been reported that *Drusus* emerges at dusk (Ivković i sur., 2011)

*Ivković i sur. (2011) reported that *Drusus* emerges at dusk.*

Drusus emerges at dusk (Ivković i sur., 2011)

Insecurity (indecision)

We speculate that Z may be a possible reason why X affects Y.

We propose that X affects Y because of Z...

In our opinion it is not an unjustifiable assumption that... 😊😊

Common mistakes

Excessive use of brackets

Integrate the relevant, throw out the irrelevant

1. We recorded significant reduction in the number of caddisflies (34 %).

We recorded reduction in the number of caddisflies by 34 %.

We recorded significant reduction in the number of caddisflies.

2. We separately analyzed the permanent (Oligochaeta, Acarina, Gastropoda) and temporary aquatic fauna (Ephemeroptera, Plecoptera, Trichoptera).

We analyzed separately the permanent and temporary aquatic fauna.

Do not interrupt the flow of thought with inserted brackets.

Performance was measured with a CX1 hygrometer (Pullman Inc., OR) at 20 °C.

Performance was measured at 20 °C with a CX1 hygrometer (Pullman Inc., OR).

Common mistakes

Inconsistency

We recorded 14 taxa of **Trichoptera** [...] the most dominant insects were **caddisflies**.

SO₂ converts to **sulphuric acid** when in contact with...

Using complicated toponyms - (local)patriotism

Samples taken at Čikotina Lađa differed from the ones taken at Novakovića Brod ...

Samples at Site 1 differed from the ones at Site 2 ...

(If needed - state the toponyms in Methods/Study site)

Common mistakes - spot them

Three out of ten fathers and 17.0% of mothers have a college or university degree. In contrast, without primary education is only 7.5% of mothers and 3.8% fathers, and with primary school a little more than one fifth of mothers and 17.1% of fathers.

A bit less than a fifth (17.6%) of the surveyed Torcida members still lives with one parent, but considering the frequency of divorces in recent years (it is estimated that in 1991 in Split on three new marriages came one divorce) it can be concluded that the most active Torcida members do not come, at least to a greater extent, from, 'broken families' extensively more than their peers ...

Common mistakes - Vague and ambiguous comparisons



Griotte contain more alcohol, so we think it is more beneficial to consume them before lectures in Principles ...



Griotte contain more alcohol than other candy, so we think they are a better choice for consumption before the lecture ...

The lady hit the man with an umbrella.



'Conceptual understanding of cell division and inheritance among students in elementary school.'

Try to improve

Common mistakes

Personification




From Table 5 it is evident that the **detritivores recorded** positive correlation with AFDW.

The abundance of detritivors was positively correlated with AFDM (Table 5).

G. fossarum had the greatest influence on the seasonal changes in number of shredders.

Change in abundance of G. fossarum caused the observed variability in abundance of the shredders.





Common mistakes

Poor labeling of attachments (F&T)
(omitting explanation of abbreviation in the legends, units, axis titles ...)

Overcrowding of Figures and Tables

Too small font and graphics in attachments

Meaningless decimal places

Citing sources in the reference list that is not in the text, and *vice versa*

Common mistakes of non-native English speakers


Word choice is not the difference between an acceptable and a unacceptable paper – but it can be the difference between a good and a great paper.

Journal of Young Investigators
www.jyi.org

Poor choice of words:

Content of X **increased** in the impact group compared to the control.

Content of X **was higher** in impact group than in the control group.



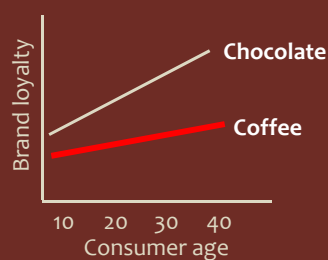
Group	Content of X
Control	Low
Impact	High

Common mistakes of non-native English speakers

Poor choice of words:

Brand loyalty **is higher** with age.

Brand loyalty **increases** with age.



Comparison - Comparative adjective;

Action/process - Verb

Common mistakes of non-native English speakers

Lack of 'Parallel structure'

Repetition of a chosen grammatical form within a sentence. By making each compared item or idea in your sentence follow the same grammatical pattern, you create a parallel structure...

Mary likes hiking, swimming, and **to ride** a bicycle.

Mary likes hiking, swimming, and riding a bicycle.

Mary likes to hike, to swim, and to ride a bicycle.

Common mistakes of non-native English speakers

Lack of 'Paralel structure'

Nonlinear regression gave more accurate results with Bonferroni correction than ANOVA.

Possible interpretation 1 – comparison of analyses
NL regression with Bonferroni correction gave more accurate estimates than **ANOVA gave/did**.

Possible interpretation 2 – comparison of corrections
 NL regression gave more accurate estimates **with the Bonferroni correction** than **with ANOVA**.

Common mistakes of non-native English speakers

The & a(n)

Temperature is an important factor...

Temperature is the most important factor...

Decay was driven by an unknown factor...

Decay was driven by the force of water...

<http://www.better-english.com/grammar/the.htm>

Which v. that

The paper that you lent me is in my bag.

The paper, that you lent me, which is excellent, is in my bag.

On/in v. at

We sampled on the Plitvice Lakes; We stored samples at plastic bags.

We sampled at the Plitvice Lakes; We stored samples in plastic bags.

Common mistakes of non-native English speakers

Direct translation (Google) & 'synonyms' tool (Word)

Phrases are often incorrectly translated from 'small' languages

Complex and expert language is almost never translated correctly...

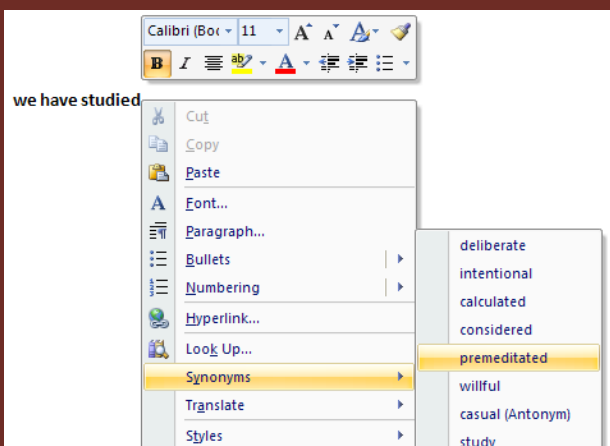
If GT translates it correctly
It is written clearly and concisely!



- ✘ Google *On low trophy of this hydrosystem indicate presence of trout...*
- ✘ Google *For low trophic this phenomenon indicates the hydro trout...*
- ✔ *Presence of trout indicates low level of trophy in this stream...*
- ✔✔ *Presence of trout indicates low level of organic pollution...*

Common mistakes of non-native English speakers

Direct translation (google) & 'synonyms' tool (word)



Non-scientific & emotional text

In the seventies Gregurić very strongly defined his recognizable style of painting, painting profile and distinctive style, relying on virtuosic knowledge of technical skills, accepting the tradition of experience of "Molve segment" within the Podravina art circle, and above all respecting the need and urge to speak in his own distinct language.

Forming himself on a standardized poetics of Molve expression, therefore on the line of Kovačić painting viewpoints and bearing for long time quite distinctive elements of this "style" (vegetation, houses, colors, atmosphere) Gregurić has, accepting that dominant rich iconography, found that not even the brightest epigonism cannot measure up to the worst example of establishing own ways of expression.

Česte pogreške (u pisanju hrvatskim jezikom)

Da li **će**... ❌

Hoće li... ✅

Da li **je**... ❌

Je li... ✅

Je li **hoće**... ❌❌

Paronimi

vapnenjački / vapneni / vapnenasti

elektronski / elektronički / električni

Česte pogreške (u pisanju hrvatskim jezikom)

Č i Ć / je i ije

Futur

Koristit ćemo metodu... = Metodu ćemo koristiti

Futur 2.

- Ako ćemo biti dobri, možda ćemo ugledati štrumpfove.
- Ako budemo dobri, možda ćemo ugledati štrumpfove.
- Ako budemo dobri, budemo ugledali štrumpfove.

Posuđenice/tuđice:

Kvaliteta, period, (in)direktno, grupa, kategorija, sistem, vertikalno, maksimalno, abundancija...

'Hiperkorektnost'

Htjeo, vidjeo, ...



Česte pogreške

Pošto = nakon što ≠ budući da

Optimalno, ekstremno, maksimalno ⇒ ne stupnjuju se

Bitno, savršeno ⇒ ne valja stupnjevati

Često puta, nekoliko alternativa, **Vremensko razdoblje**

U mogućnosti, u potpunosti

Bez da ⇒ A da ne

⇒ iako, premda

⇒ glagolski prilog

⇒ glagolska imenica



*Srušio me (je), a da me nije ispitao
iako me nije ispitao
ne ispitavši me
bez ispita*